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ABSTRACT

This document consists of two teaching manuals designed to accompany a commercially-available "multicultural, interdisciplinary video program," consisting of four still videotape programs (72 minutes, 226 frames), one teaching poster, and these two manuals. "Teacher's Manual: Ancient Greek Architecture" covers: "Ancient Greek Architecture 1," which looks at early column styles, structures of the Acropolis, and architectural features of the Parthenon; and "Ancient Greek Architecture 2," which presents frieze and relief sculpture, the Propylaea, the Temple of Athena Nike, the Erechtheum, and mature column styles. "Teacher's Manual: Ancient Greek Sculpture" presents "Painting and Sculpture 1," which examines archaic exemplars from Crete and Greece, including Kouros, Kore, Geometric and Black Figure Style vases, and Severe Style figures; and "Painting and Sculpture 2," which examines exemplars of Classical and Hellenistic style. The teaching manuals include scripts of the filmstrips, suggested student activities, discussion guides, reproducible student worksheets, quizzes with answer guides, glossaries, and bibliographies. (MM)

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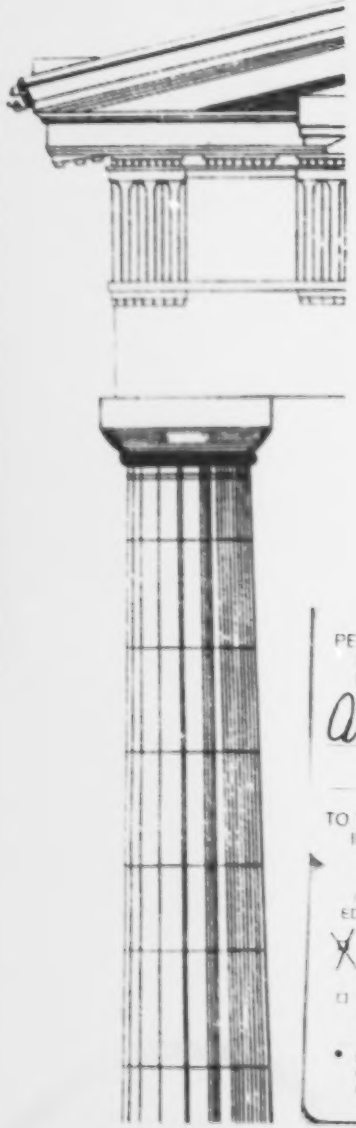
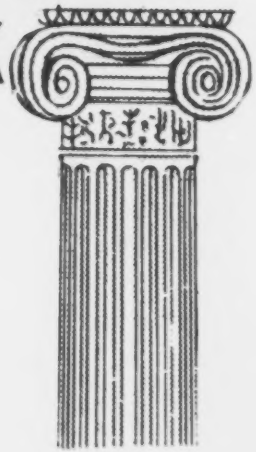


TEACHER'S MANUAL

ANCIENT GREEK ARCHITECTURE



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HISTORY through ART and ARCHITECTURE

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TEACHER'S MANUAL
ANCIENT GREEK ARCHITECTURE

Written and illustrated by Ann Campbell

SOUND FILMSTRIPS/VIDEOS

CONSULTANTS:

Jeanne DuPlan Lee, Chairman of the Social Studies Department of Boulder High School, Boulder, Colorado

Dr. John Hoag, Professor of Art History, University of Colorado, Boulder, Colorado

Concept:

HISTORY THROUGH ART AND ARCHITECTURE Sound Filmstrips were developed as a unique program to expand a student's horizon in history. In learning about the art and architecture of a period, a student not only finds visual pegs on which to hang facts and dates, but often discovers, to his or her amazement, that today is merely a new twist on ancient history.

When a student sees a column, a clerestory window, a sculpture in relief, or even a friend standing in a "contraposto" pose, he is seeing ancient history repeated in his own time.

A student's personal ideas and experiences are continuously related to those of past periods. For the gifted student, whole new worlds are opened up. For the slower learner, his or her eyes are opened and he will suddenly SEE what he never noticed before.

Special music, using the Greek Dorian and Ionian modes, has been composed by Jonathan Baird for this filmstrip. His essay on Greek music is on page 8.

This program was created and developed by Ann Campbell, and used at Boulder High School over a six year period by Jeanne Lee, Chairman of the Social Studies Department.

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ANCIENT GREEK ARCHITECTURE

Contents:

1-2	Concept, Use and Instructions
3-7	Script of Greek Architecture 1
8	Discussion Questions, composer and music
9-10	Student Sheet (to be xeroxed for each student)
11	Quiz No. 1 (to be xeroxed for each student)
12	Fun Quiz (to be xeroxed for each student)
13-17	Script of Greek Architecture 2
18	Discussion Questions, Answers to Quiz No. 1, No. 2 and No. 3
19-20	Student Sheet (to be xeroxed for each student)
21	Quiz No. 3 (to be xeroxed for each student)
22-24	Activities

Instructions for Filmstrip

1. Advance filmstrip to FOCUS frame: adjust
2. Advance filmstrip to next frame
3. Start cassette
4. a For automatic equipment: use side 1 of audio-tape cassette. Narration is cued with inaudible signals. Filmstrip advances mechanically.

4. b For manual equipment: use side 2 of audio-tape cassette. Narration is cued with audible signals. Advance filmstrip one frame at each audible signal.

Running time: approximately 18-19 minutes

To present filmstrip at varied pace, omit cassette and deliver narration in person.

Use:

For best results please follow the suggested program below:

PRIOR TO SHOWING FILMSTRIP/VIDEO

1. Please xerox both sides of the STUDENT SHEET (pages 9 and 10 and pages 19 and 20) and give to each student. The STUDENT SHEET includes terms, diagrams, identifications and dates of each frame. There is also space for notes and comments.
2. Xerox any quizzes you wish to use in teacher's manual.
3. Please be SURE to do the suggested activity before each filmstrip. Each activity personally involves the student and helps lead him or her into the past in a way which he can understand.

SHOW FILMSTRIP/VIDEO

AFTER SHOWING FILMSTRIP/VIDEO

1. At the end of each script there are discussion questions (pages 8 and 18) aimed at sparking student participation.
2. If you intend to show two filmstrips in one class period, we suggest that you give each student a copy of the multiple choice Fun Quiz (page 12) to do while you change the filmstrip and cassette. We find humor an excellent teacher.
3. A more serious quiz can be given now or at a later date. These quizzes are specifically designed to reinforce their new knowledge rather than tax it.

ANCIENT GREEK ARCHITECTURE 1

Temple of Athena Nike Acropolis, Athens, Classical

1 Title: Ancient Greek Architecture I, Acropolis, Athens, Greece, Classical

2 Temple of Athena Nike, Acropolis, Athens, Classical

3 A contemporary house

4 A ground plan

5 An elevation drawing

6 Diagram of post and lintel

7 Street scene, Salisbury, England

8 Bank

9 Hamburger stand

10 Elevation drawing with normal figure in front

11 Elevation drawing with figure three times normal size

12 Elevation drawing with figure three times as SMALL

ACTIVITY BEFORE FILMSTRIP:
Have each student draw the layout of the rooms on the first floor of his or her house or apartment. This is called a floor plan or a ground plan. Now have each one draw a picture of the outside, front of their home. This is called an elevation drawing. This will help them relate the architecture they live in with the architecture of ancient Greece.

In a moment we will be looking at Greek Architecture, but first what does architecture mean to you?

Do you live in a house or an apartment? Where is the kitchen, the bathroom, livingroom or bedroom on your first floor?

What if you drew a diagram of the rooms on the first floor of your home? A diagram of the rooms is called a **floor plan** or a **ground plan**.

Perhaps the outside of your house or apartment building looks very special. Maybe you have narrow, vertical windows or wide, horizontal windows. Your front door may have a window in it or have intricate carving around the edge. This outside view of your home is called an **elevation** drawing. Could you draw an elevation drawing of the outside of your home?

Unless you live in a dome house or an ultra modern house, your home is probably **post** and **lintel** construction or a similar variation of it. That is, two posts hold up a beam or lintel.

Certainly your home is built with different materials. It has wooden studs, a stone or brick chimney or plaster walls. If you walk along the main street of your town or city you will see many different buildings. Maybe there is a bank, a hamburger stand, a movie theatre, shops or a church. Each building has its own **function** and each function has its own **design**.

In other words, a bank must be made out of strong, permanent, fireproof materials like stone or steel, so that robbers cannot break into it nor a fire burn up the money.

The hamburger stand, on the other hand, is less permanent and is probably built of wood, lots of glass and plastic to allow you to buy a humburger quickly. So you could say that the **function** of a building dictates its **ground plan, elevation, construction, materials** and of course, what it looks like or its **design**.

Let us say that this is your house and this is you standing beside your front door.

What happens if we draw you three times as large? Your house looks like a doll house in comparison to you.

Now we erase the figure and draw you one third as small. Suddenly your house has grown enormously large. We have changed the scale or proportion of your house. In relation to you it has become huge. It is this relationship to the human figure that gives scale to buildings.

4

13 FUNCTION, GROUND PLAN, ELEVATION, CONSTRUCTION, MATERIALS, SCALE OR PROPORTION equals DESIGN

We have then six elements relating to architecture: **function, ground plan, elevation, construction, materials** and **scale** or **proportion**. How you put all these together is called **design**.

14 Ruin of a modern restaurant after a fire

One more thing, if we had a sudden fire bombing, what would remain of your home or your town or city? Just like this recently burned out restaurant, only the foundations and chimneys would survive because they were built of stone, cement or brick. Undoubtedly the walls of some stone buildings, like banks, would be left standing but their interiors would be burned away.

15 Parthenon, Acropolis, Athens, Classical, c447 B C

In this Greek ruin, try to imagine what it might have looked like before fires or simply time rotted away all the burnable materials. Remember, that anything made of wood or fabric burned and all that is left is the stone work. Even some of that is gone, for people stripped away good marble and reused it, much as we might go to the dump to find something useful.

16 Acropolis, Athens, Classical

This is the Acropolis at Athens in Greece, built around 450 B C., high above the city on a lofty outcropping of rock. You can see the Parthenon shining and white on the very summit of the Acropolis. In 480 B C. the Persian army, under Xerxes, burned Athens to the ground, including the Acropolis. Not long after, the outraged Greeks defeated the Persians in the naval battle at Salamis.

Pericles by Krisilas

17 Pericles, who ruled Athens from 460-429 B C., Roman copy of statue by Krisilas, Classical, Vatican Museum, Rome, c440 B C

The rebuilding of the Acropolis was begun by Pericles, the wise and judicious statesman, who ruled Athens from 460 B C. to 429 B C. Pericles dreamed of a new city of temples dedicated to the Greek gods atop the Acropolis and commissioned artists and architects to build it. We call this period the Golden Age of Greece.

18 Parthenon, Acropolis, Athens, Classical

This city of temples was built to glorify the gods. Before looking at the Acropolis more closely, let us look at a crude construction also built to glorify the gods.

19 Stonehenge, Wiltshire, England, c2000 B C

This is Stonehenge in Wiltshire, England, believed to have been built around 2000 B C. by a Megalithic, prehistoric people. This construction is post and lintel and the materials are huge megalithic rocks. **Mega** means huge and **lithic** means rock.

20 Another view of Stonehenge

It is thought that these megalithic rocks, arranged in circles, were used to measure the movements of the stars and sun. They certainly had religious meaning. You can see that post and lintel is probably the simplest and most basic construction there is.

21 Palace of Knossos, Crete, Minoan, 1500 B C

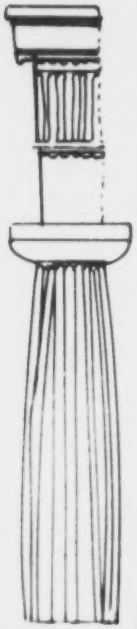
This Palace at Knossos in Crete was built around 1500 B C. by the Minoans. But it is very sophisticated in comparison to Stonehenge. This is how archeologists have restored it. The Palace at Knossos had a very different function than Stonehenge. It was not built for religious reasons but was built to live in.

22 Hall of Shields, Palace of Knossos, Crete, Minoan, 1500 B C.

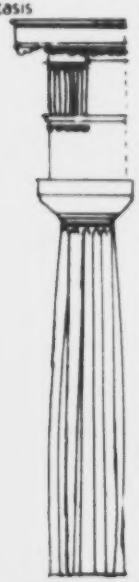
Originally its columns were made of wood and were smooth, rounded and elegant with handsome tops called **capitals** crowning them. You can see that these columns taper but are thicker at the top than the bottom. The original columns rotted long ago, but archeologists have reconstructed them according to the columns shown in the wall painting in the Palace at Knossos.

23 Queen's Megaron from Palace at Knossos

Here in the Queen's apartment, called a **megaron**, the walls were covered with plaster and painted with murals of leaping dolphins. Archeologists also discovered a complicated sewerage system built below the floor. This is also post and lintel construction.



Column from Basilica at Paestum, showing entasis



Column from Temple of Aphaia, Aegina, Late Archaic

24 Citadel at Mycenae, Greece, c1300 B.C.

Mycenaean traders came to Greece as early as 2000 B.C. and were probably the earliest ancestors of the Greeks. High on a hill with the sea in the distance, they built a great citadel called an **acropolis** at Mycenae with palaces, tombs and a splendid entrance gate.

25 Lion's Gate, Mycenae, Greece, c1300 B.C.

This Lion's Gate at the entrance of Mycenae is dated around 1300 B.C. You can see that it is also post and lintel and built of huge blocks of stone.

26 Detail of Lion's Gate

The two lions, who have lost their heads, are fitted into the triangular space between the huge stones on top of the lintel. The two lions confront each other with a column dividing them. This is the same kind of column that we saw at Knossos in Crete. It tapers, also becoming thicker at the top than at the bottom.

27 Temple of Apollo, Corinth, Greece, Archaic, c550 B.C.

Not far from Mycenae was ancient Corinth, where this great Temple of Apollo once looked out to sea. It was built by the descendents of the Dorians in the 6th century B.C. The Dorians were a warlike people who invaded the Peloponnese around 1100 B.C. and destroyed the city of Mycenae.

28 Another view of Temple of Apollo

The function of this temple was to glorify the gods. Its materials were marble and stone and its construction was post and lintel. Unlike the columns at Knossos, these tall, thick columns were thicker at the bottom than at the top. They once held up a heavy, stone lintel, which in turn held up a wooden roof, long since burned down.

29 Another view of Temple of Apollo

You can see that each column is topped by a square block of stone called a **capital**. This column and square capital is called **Doric**, after the Dorians who invaded the area.

30 Basilica at Paestum, Italy, Archaic, c550 B.C.

We see here the Basilica at Paestum, another temple with Doric columns, built around 550 B.C. We call this period of time Archaic Greek.

31 Detail of Basilica

Can you see that each of these tapered columns had a slight bulge to it? Let us say you took a block of rubber and sat on it. It would squish out or bulge. When you got up, it would spring back up again. This same effect occurs with the Doric column. Its slight bulge is called **entasis**. It gives you the feeling that it will spring back up and therefore can easily support the heavy load of the **entablature**. What is the entablature? The entablature is the whole area above the columns.

32 Drum of a column

If you look closely you can see how the columns were made. Each was made up of separate drums of marble held together with a stone dowel or peg in the center, which you cannot see.

33 Column showing flutes

After they were put together, the column was **fluted**, that is, grooves were cut vertically into the shaft of the column all around it. This gives the column a slimmer and more elegant appearance.

34 Another view of Basilica at Paestum

The capitals, here, are huge and top heavy. Perhaps the architect thought he needed them big in order to hold up the heavy weight resting on top of it. What is the scale of this temple in relation to you? In comparison to you, the temple is huge, which in turn makes you feel very small. The architect wanted to let you know that the gods were much more important than you.

35 Temple of Aphaia, Aegina, Late Archaic, c490 B.C.

High on a promontory above the sea on the island of Aegina, stands the Temple of Aphaia, built around 490 B.C. These are also Doric columns. Perhaps you can see that the Temple of Aphaia is much less heavy than the Basilica at Paestum. The entablature is less thick and the columns are slimmer with less entasis or bulge. And the capitals are smaller too.

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36 Interior of Temple of Aphaia

Inside a double row of smaller columns, one on top of the other, held up the roof.

37 Temple of Aphaia

While the Temple of Aphaia is large, it is less huge in comparison to you than the Basilica at Paestum. If you stood in this temple you would feel small but not as small as in the Basilica.

38 Temple of Concord, Agrigento, Sicily, Classical, c450 B.C.

Greece reached its greatest heights and productivity under the rule of Pericles from 460 B.C. — 429 B.C. We call this time the Classical period or Golden Age of Greek art. Many temples, such as this Temple of Concord, were built in Greece and in the Greek colonies in Sicily and Italy.

39 Ground plan of typical Greek temple after Grinnell

This is a ground plan of a typical Greek temple. As you can see it has six columns on the shorter side and thirteen on the longer one. Inside, it had three rooms. The center room was the **cella** or **naos**, and in here was kept the statue of the god or goddess. The thick lines represent solid walls, while the dots represent the columns and the finer lines are steps. You can see too, that the typical Greek temple always had a colonnade going around the entire outside. A Greek temple always faced east so that the rising sun, through the great east doors, lighted the image inside.

40 Temple of Hephaestus, Athens, Classical, c450 B.C.

This is the well preserved Temple of Hephaesus of the Classical period. It is a smaller version of what the Parthenon must have looked like and it was designed by the same architects, Ictinus and Callicrates.

41 Detail of Interior of Temple of Hephaestus

To get inside this temple you can enter from any place in the colonnade and work your way into the **pronaos**, or front entrance room. Basically, the Greek temple was not used as a gathering place inside, but rather, it was designed for processions and rites held outside. Even the temple's altar was placed outside at its eastern end.

42 Parthenon, Acropolis, Athens, designed by Ictinus and Callicrates, Classical, 447 B.C.

We come now to the Acropolis at Athens, to the greatest Doric temple of all times, the Parthenon.

43 West view of Parthenon showing scaffolding

Today, there is almost always scaffolding around parts of the Parthenon and the other buildings on the Acropolis because the pollution of Athens is eating away the marble and the building must constantly be restored.

44 Parthenon from the east

The Parthenon was designed by Ictinus and Callicrates in 447 B.C. How does it compare to the Basilica at Paestum and the Temple of Aphaia at Aegina? It is far lighter and more graceful. Each column is slimmer, the capitals are smaller and the bulge or entasis is more subtle. Even the entablature resting on top of the columns is lighter and less high in relation to its width.

Column from Parthenon, Acropolis, Athens

45 Statue of Doryphoros by Polycleitos showing lines of proportion, Classical

You should feel in perfect harmony with the Parthenon for the entire structure was built to harmonize with man. The proportions of the Parthenon are based on the proportions of man, that is, seven to one. The ideal human figure is seven heads tall. "Man is the measure of all things," said Protagoras. This was the philosophy of the age of Pericles. 1900 years later, it was the philosophy of the Italian Renaissance as well.

46 View of steps and stylobate showing curve of Parthenon

The Parthenon has many small imperfections created on purpose to make it seem more perfect to the human eye and, at the same time, more alive. For example, the floor of the Parthenon, called the **stylobate** is convex. If you squint you can see the curve of the steps and stylobate.

47 Diagram showing curve of Parthenon

In this drawing, you can see that the architects deliberately made them curved. The curve was put there to correct the optical errors in the human eye, so it would produce the illusion of a perfect horizontal. Even the thickness of the columns and their spacing varies.

48 Interior of Parthenon

We must not forget that parts of the Greek temple were painted to set off its sculpture and columns. Here in the interior of the temple, the Doric columns seem to reach up and easily support the weight of the stone lintels resting on top of them. There was also a double row of smaller columns to support the roof, like those at the Temple of Aphaia.

49 Frieze on cella lintel of Parthenon

Carved on the lintels of the cella or naos, beneath the porches at both ends of the temple, was a frieze showing the Panathenaic Procession. This was a procession held every four years in honor of Athena. Hundreds of figures move around it, some rapidly, like the men on horses and some more slowly, like the figures carrying the sacred garments of Athena.

50 Ground plan of Parthenon

As you can see from the ground plan, the Parthenon had only two rooms in its interior, a treasury which was more often than not empty, and a cella or naos.

51 Drawing of what interior statue of Athena, by Phidias may have looked like Classical, 432 B.C.

We are told that in the naos there was an ivory and gold statue of Athena designed by Phidas, about 35 feet tall. It reached almost to the wooden, trussed roof. Historians tell us that this statue was carried off to Constantinople during the 6th century A.D.

52 Print of Parthenon blowing up in 1687A.D.

In Christian times the Parthenon was used first as a Byzantine and then as a Catholic church. Athena was replaced by the Virgin Mary. Under Turkish rule it became a mosque. However, since 1687 it has been in ruins for the Turks used it to store ammunition and when an attacking Venetian rocket scored a direct hit, the Parthenon blew up. Later in 1801, Lord Elgin gathered up the broken pieces of its sculpture and shipped them to the British Museum in London, which saved what little sculpture there was left. Today, these are known as the Elgin Marbles.

53 Restoration drawing of east pediment of Parthenon

In the triangular space of the entablature, called the **pediment**, were huge figures carved in stone. This is what archeologists believe the two pediments once looked like. On the east end was the Birth of Athena, Goddess of Wisdom, who sprang fully grown from the head of Zeus, her father, while the other gods looked on.

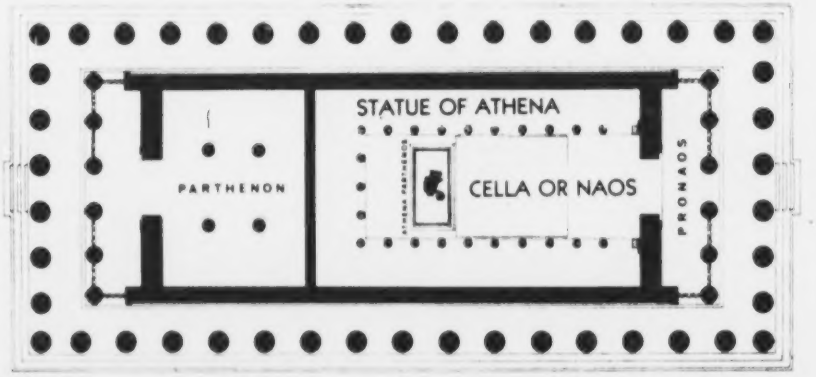
54 Restoration drawing of west pediment of Parthenon

On the west pediment we see the contest between Athena and Poseidon for possession of Athens. Athena offered an olive tree, while Poseidon offered a horse and a spring of salt water. Obviously, Athena won for Athens was named after her. All that was left of these sculptures after the blast are in the British Museum and will be shown in our next filmstrip. Harmony, and temperance, love of knowledge, athletics and music, balance and symmetry. These were the ideals of the Age of Pericles and the Golden Age of Greece.

55 Parthenon (The End)

Even in ruins and without its sculpture, the Parthenon seems to embody these Greek ideals.

Parthenon, Acropolis, Athens



Plan of the Parthenon

Discussion:

Greek ARCHITECTURE 1

1. What does architecture mean to you?
2. How do the ancient Greek Temples compare to our places of worship today?
3. What do you feel was the Greeks most important contribution to architecture?
4. In what ways did Protagoras' statement, "Man is the measure of all things," apply to Greek architecture?
5. What elements relating to architecture constitute design? How do they apply to Greek architecture and to us today?

SPACE FOR NOTES AND COMMENTS:

MUSIC by Jonathan Baird

About the music in this unit

While little is known about the sound of ancient Greek music, we know a good deal about its principles and ideals. Musical training on the lyre, a multi-stringed instrument was a major part of the education of young men. The musician often used the lyre, as well as the "kithara" and an early version of the harp, as accompaniment to verse. Probably phraseology was very close to that of spoken verse and repetition with variation an integral part of musical values. Instrumental proficiency was not highly regarded, rather the artistic expression and depth of feeling were considered the most worthy in Greek music.

Pure melody, without chordal accompaniment, was the basis of their music, and to our own ears this might have sounded a bit thin. While there was no theory of harmony per se, there was careful attention to the system of harmonic intervals, which was considered a related field to Pythagorian geometric studies and reflected positions of the stars and planets in the ancient heavens. The Greeks did understand the use of modes and distinguished between the more Asian melodies such as those composed in the Phrygian or Lydian modes, which tempted and undermined the character, and those in the Dorian mode, austere and virtuous. Dorian melody was thought to enhance military and civic spirit and was the more formal state-approved sound. Like our own popular music today, however, these other melodies remained part of the culture and crept into less formal use such as dance and celebration.

While stringed instruments were an important part of Greek music, there was also extensive use of reed type flutes, especially as background to the "symposium" drinking parties, trumpet-like instruments for use in war, and especially vocal music, not only in the theatre, but in the omnipresence of the "bard" or traveling poet, who would sing the legends of the gods and the glorious past.

The pieces in this unit represent some of this diversity of expression, although they have been enhanced for our modern ears through the addition of harmonic interpretation which may have been assumed by the Greeks but not actually played. The first piece, set in the Dorian mode, might be a theme of Periclean order, possibly used during a civic invocation or building dedication. The second piece is a dance set in the Lydian mode that might have been heard at a private celebration or out in a village in the countryside. The third piece is also in the Dorian mode and is set in a military context, as a memorial for those killed in combat and inspiration for new feats of courage.

9

Student Sheet

ANCIENT GREEK ARCHITECTURE 1

1. Title: Ancient Greek Architecture I, Acropolis, Athens, Greece, Classical

2. Temple of Athena Nike, Acropolis, Athens, Classical

3. A contemporary house

4. A ground plan

5. An elevation drawing

6. Diagram of post and lintel

7. Street scene, Salisbury, England

8. Bank

9. Hamburger stand

10. Elevation drawing with normal figure in front

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13. FUNCTION, GROUND PLAN, ELEVATION, CONSTRUCTION, MATERIALS, SCALE OR PROPORTION equals DESIGN

14. Ruin of a modern restaurant after a fire

15. Parthenon, Acropolis, Athens, Classical, c447 B.C.

16. Acropolis, Athens, Classical

17. Pericles, who ruled Athens from 460-429 B.C., Roman copy of statue by Krisilas, Classical, Vatican Museum, Rome, c440 B.C.

18. Parthenon, Acropolis, Athens, Classical

19. – 20. Stonehenge, Wiltshire, England, c2000 B.C.

21. — 23. Palace of Knossos, Crete, Minoan, 1500 B.C.

24. Citadel at Mycenae, Greece, c1300 B.C.

25. — 26. Lion's Gate, Mycenae, Greece, c1300 B.C.

27. — 29. Temple of Apollo, Corinth, Greece, Archaic, c550 B.C.

30. — 31. Basilica at Paestum, Italy, Archaic, c550 B.C.

32. Drum of a column

33. Column showing flutes

34. Another view of Basilica at Paestum

To be xeroxed for each student

35 — 37. Temple of Aphaia, Aegina, Late Archaic, c490 B.C.

38. Temple of Concord, Agrigento, Sicily, Classical, c450 B.C.

39. Ground plan of typical Greek temple after Grinelli

40 — 41. Temple of Hephaestus, Athens, Classical, c450 B.C.

42. Parthenon, Acropolis, Athens, designed by Ictinus and Callicrates, Classical, 447 B.C.

43. West view of Parthenon showing scaffolding

44. Parthenon from the east

45. Statue of Doryphoros by Polycleitos showing lines of proportion, Classical

46. View of steps and stylobate showing curve of Parthenon

47. Diagram showing curve of Parthenon

48. Interior of Parthenon

49. Frieze on cella lintel of Parthenon

50. Ground plan of Parthenon

51. Drawing of what interior statue of Athena, by Phidias may have looked like Classical, 432 B.C.

52. Print of Parthenon blowing up in 1687 A.D.

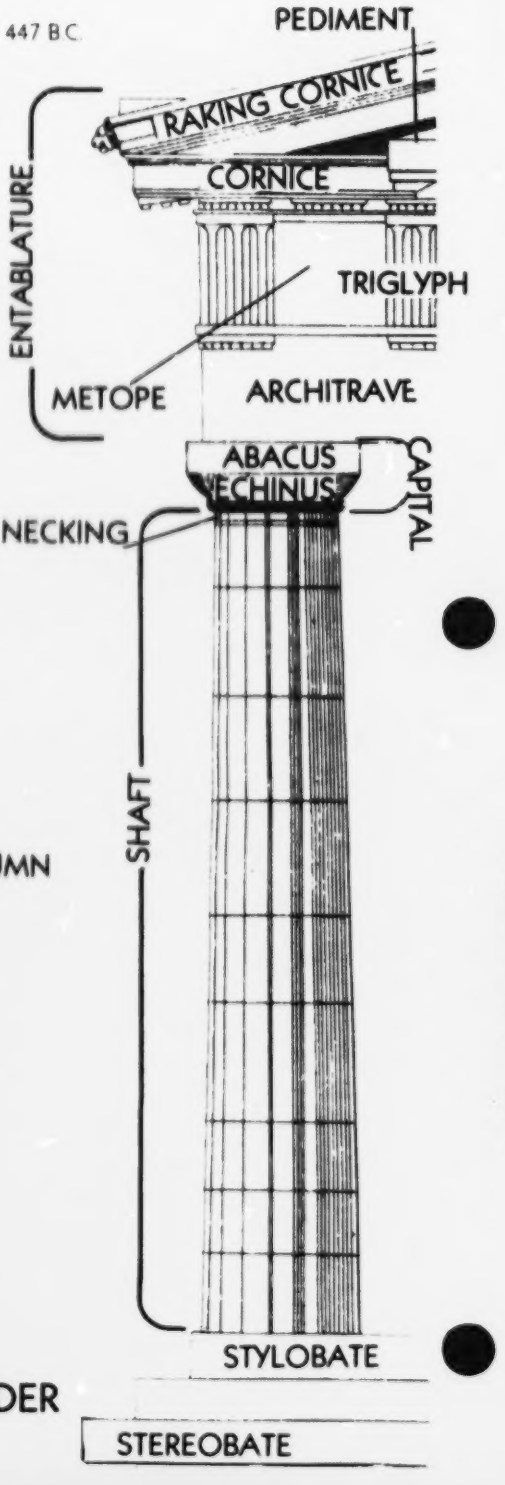
53. Restoration drawing of east pediment of Parthenon

54. Restoration drawing of west pediment of Parthenon

55. Parthenon (The End)

10

To be xeroxed for each student



DORIC ORDER

GROUND PLAN OF TYPICAL GREEK TEMPLE, AFTER GRINNELL

21

Student Sheet

Quiz

Greek Architecture 1
Quiz No. 1

1. _____ Stonehenge
2. _____ An acropolis
3. _____ How you would feel standing next to a skyscraper
4. _____ How you would feel standing next to the Parthenon
5. _____ Columns at Palace of Knossos, Crete
6. _____ Entasis
7. _____ Basilica at Paestum
8. _____ "Man is the measure of all things."
9. _____ Lion's Gate
10. _____ Entablature
11. _____ Golden Age of Greece
12. _____ Architects of the Parthenon
13. _____ What surrounds a typical Greek temple?
14. _____ Elgin Marbles
15. _____ Pediment
16. _____ Subject of west pediment
17. _____ Harmony, temperence, love of knowledge, athletics, music, balance and symmetry
18. _____ The six elements of design

A. Ideals of the Age of Pericles

B. Triangular area inside entablature

C. Contest between Athena and Poseidon

D. Time of the rule of Pericles 460-429 B.C.

E. Ictinus and Callicrates

F. Colonnade

G. Function, ground plan, elevation construction, materials and proportion or scale

H. The whole area above the columns on a building

I. Protagoras, and the philosophy of the Age of Pericles

J. Entrance to Mycenae

K. Tapered, but are smaller at bottom than at the top

L. A bulge that gives spring to a column

M. Huge Doric columns with heavy entablature and exaggerated entasis

N. Tiny and insignificant

O. Earliest type of post and lintel construction used for religious purposes

P. A citadel on a high outcropping of rock

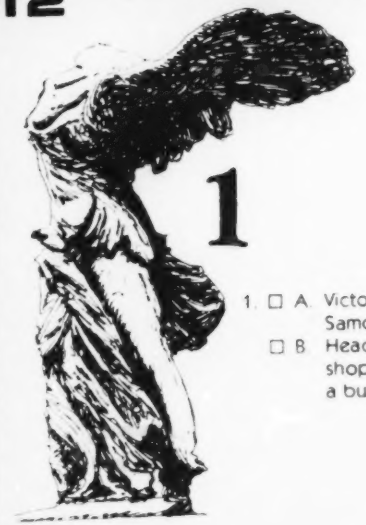
Q. Sculptured figures from the Parthenon that Lord Elgin took to England in 1801 A.D.

R. Comfortable

To be xeroxed for each student

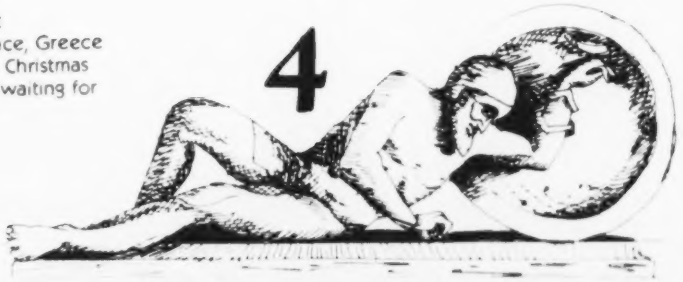
TEST YOUR SAVVY OF HISTORY through ART and ARCHITECTURE

Grab a pencil and take this 60 second quiz.



1

1. ☐ A. Victory at Samothrace, Greece
   ☐ B. Headless Christmas shopper waiting for a bus



4

4. ☐ A. The Dying Warrior, Temple of Aphaia, Aegina, Greece
   ☐ B. A nude waiter looking for his contact lens

5

5. ☐ A. Kore, Greek Maiden, with her Archaic Smile
   ☐ B. A Groupie waiting backstage for a Rock and Roll star.

6

6. ☐ A. Close-up shot of Long John Silver's peg leg
   ☐ B. A Greek Doric column

2. ☐ A. World's first MacDonald Hamburger Stand
   ☐ B. The Erechtheum, Athens, Greece

2

7

7. ☐ A. A decorative waste paper basket
   ☐ B. A Greek Corinthian column and capital

8

8. ☐ A. Kouros, Young Athlete, Archaic Greek
   ☐ B. Lifeguard at the local swimming pool

3

3. ☐ A. A Roman footstool with ram's horn decoration
   ☐ B. A Greek Ionic column and capital

Horses and Riders from Panathenaic Procession

ANCIENT GREEK ARCHITECTURE 2

1 Title: Ancient Greek Architecture II, Temple of Athena Nike, Acropolis, Athens, Classical

ACTIVITY BEFORE FILMSTRIP:
Ask the student to tell what kind of pictures, photographs or even statues they have at home that tell about themselves and their families, playing baseball, football, tennis, swimming, winning prizes. Ask them about their places of worship. Are there paintings, sculpture or carvings that tell about their religion and beliefs? A Greek temple had sculpture on it that told a story about the god or goddess to whom it was dedicated.

2 Family photograph

In your home you probably have pictures that tell a story about you and your family. Perhaps in your church or temple there are paintings, sculpture or even stained glass windows that tell a story about your religion or your beliefs.

3 Parthenon, Acropolis, Athens, Classical, 447 B.C.

The sculpture on a Greek temple also told a story. In the case of the Parthenon it told how the Goddess Athena became the protectoress of Athens.

4 Interior of Parthenon showing frieze on cella of Panathenaic Procession

For example, on the **frieze** or ornamented band on the lintel of the cella or naos, on both ends of the Parthenon, Phidias the sculptor carved the Panathenaic Procession. This was a procession that was held every four years in honor of Athena.

5 Detail of frieze showing Animals Being Led to Sacrifice, by Phidias, Classical, 432 B.C.

Headed by a group of city fathers, whom you cannot see, these attendents of Athena lead the animals for the sacrifice, while others carry Athena's sacred garments.

6 Horses and Riders from Panathenaic Procession by Phidias, Classical, c432 B.C.

These nude riders on their prancing horses quicken the pace of the procession. But there is something odd about them. If one of the riders dismounted and stood beside his horse, he would be taller than his horse. Phidias knew that if he made the horses actual size, the man would appear to be too small.

7 Other Horses and Riders from above frieze

If, "Man was the measure of all things," Phidias could only resolve this idea by making the horses unnaturally small. However they are very believable horses. This type of carving in stone is called **sculpture in relief**. The stone is cut away behind the figures, leaving them raised up.

8 A Lapith and Centaur from metope on frieze on outside of Parthenon, by Phidias, Classical, c432 B.C.

These are figures from the outside frieze on the Parthenon, which are now in the British Museum in London. A Lapith is struggling with a centaur, who is half man, half horse.

9 Detail of Lapith and Centaur

It seems that the wedding of the daughter of the Lapith king was in progress, when suddenly the centaurs burst in. After getting grossly drunk, they attempted to carry off the bride and a great battle ensued. In the end the noble Lapiths overcame the beastly centaurs and reason triumphed over drunkeness and lust.

10 Detail of Lapith and Centaur

Is there real emotion shown here in the struggle? Are their mouths open in shouting or battle cries? No, the struggle between them is done with restraint. It is the moment before or just after the action, rather than the action itself.

11 Detail of Lapith and Centaur

This is part of the Classical Greek idea of harmony and balance in all things. This sculpture is also in relief because its background has been cut away leaving the figures raised up.

14

12 Restoration drawing of east pediment of Parthenon

We turn now to the pediment of the Parthenon on the east end, where Phidias carved a scene showing the Birth of Athena. Athena sprang full grown from the head of Zeus, her father, who you see in the very center of the pediment. The remains of these broken figures are in the British Museum.

13 Dionysos or Heracles from east pediment of Parthenon by Phidias, Classical, now in British Museum in London, c432 B.C.

This is Dionysos, the god of wine, although some historians think he may be Heracles. Either way, he reclines in a very relaxed pose, watching the birth of Athena.

14 Another view of Dionysos

He seems both alive and yet so naturally at ease. Phidias fitted Dionysos exactly into the sloping triangle of the pediment, with his feet tucked into the left hand corner, while his head grazed the diagonal of the roof. And yet he seems so uncrowded.

15 Back view of Dionysos

This is not sculpture in relief, but is **sculpture in the round**, because you can walk around the figure.

16 Three Goddesses from east pediment of Parthenon by Phidias, Classical, now in British Museum, London, c432 B.C.

These Three Goddesses from the east pediment of the Parthenon, carved by Phidias, are also watching the birth of Athena. What a rounded and rhythmical composition they form as they half recline or sit. How come they are not nude like Dionysos? The male athlete was the ideal of beauty in all his nakedness, but women, always thought of as second class citizens, simply had to be clothed.

17 Another view of Three Goddesses

But Phidias did the next best thing. He wrapped their bodies in the thinnest, finest, wet drapery that lets you see their forms underneath. He made deep undercuts into the stone so that light and shadow could dance over the stone forms, flowing in and around them. The rounded shapes of arms, knees, bosoms and legs catch the light, while the wet drapery seems to cling to their roundness, accentuating it.

18 The Moon Goddess Selene's Horse, east pediment of Parthenon, by Phidias, Classical, now in British Museum, London, c432 B.C.

In the corner of the east pediment, Phidias carved this fine head of a horse, but let him hang out over the edge of the pediment. It is one of the Moon Goddess Selene's horses from her chariot. His nostrils quiver and his mouth opens in a loud whinny, making him seem incredibly alive.

19 Restoration drawing of Acropolis after G.P. Stevens

This is a drawing of what archeologists believe the Acropolis in Athens probably looked like in the time of Pericles around 437 B.C. The Acropolis is about 320 feet above the city of Athens. The sheer cliff walls plus the man made walls made it a fortress almost impossible to scale.
As you can see the Parthenon is in the right rear. We will also be looking at the Erechtheum to the left of the Parthenon, at the Propylaea at the entrance of the Acropolis and at the Temple of Athena Nike to the right of the Propylaea.

20 Propylaea, Acropolis, Athens, by Mnesicles, Classical, c437 B.C.

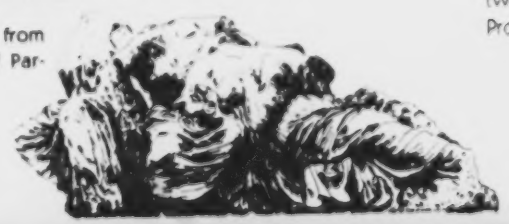
Even today the only entrance to the Acropolis is through the Propylaea, built by Mnesicles, around 437 B.C. Built on a sloping site, a magnificent stairway leads up to it. Where did we last see an entrance gate?

21 Lion's Gate, Mycenae, 1300 B.C.

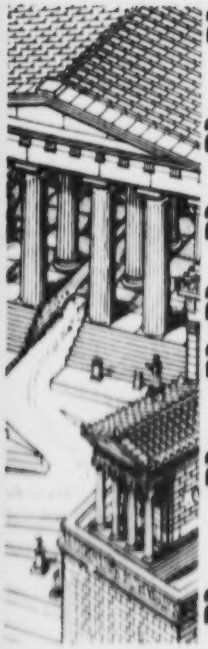
The Lion's Gate at Mycenae, but it was a lot simpler.

22 Another view of Propylaea

To reach the Acropolis through the Propylaea, people had to enter through the center section just as they do today. The two wings on either side were never quite finished. As you can see the columns are Doric, like the Parthenon. Inside the Propylaea was a library and a picture gallery with a place for people to read and rest after the long climb.



Three Goddesses from east pediment of Parthenon, Classical



Propylaea at entrance to Acropolis

23 Another view of Propylaea

When the Athenians were welcoming processions of people, the entrance gates of the Propylaea were wide open. But when the enemy threatened, the great wooden doors on the east and west porches were swung shut. There was no other access to the Acropolis.

24 Temple of Athena Nike, by Callicrates, Classical, c432 B.C.

To the right of the Propylaea is the small Temple of Athena Nike, which means Victorious Athena in Greek. This was also designed by Callicrates. Perhaps you can see there is a porch at either end.

25 Another view of Temple of Athena Nike

These columns are not Doric columns but they are Ionic. The Ionic column is slimmer and lighter all over than the Doric. The Ionic column resembles a growing plant, its capital curls into a flowering scroll called a **volute** and it also has a base.

26 Another view of Temple of Athena Nike

In the pediments above both porches were sculptured figures that no longer exist.

27 Erechtheum, Acropolis, Athens, by Mnesicles, Classical, 421 B.C.

Near the Parthenon stands the Erechtheum. The Erechtheum was named after Erechtheus, the legendary king of Athens, whose mother was Gaea, the Earth Goddess and whose father was Hephaestus, the Fire God. Erechtheus was brought up by Athena.

28 Contest between Athena and Poseidon

It was on the site of the temple that Erechtheus supposedly judged the contest between Athena and Poseidon, God of the Sea, for possession of Athens. Erechtheus chose Athena's gift of the olive tree over Poseidon's gift of the horse and a spring of salt water. The Erechtheum was made into a Christian church in the 7th century A.D. and the Turks used it for a harem in the 15th century A.D.

29 Drawing of Erechtheum

The Erechtheum does not look like the Parthenon. For one thing it does not have a colonnade surrounding it and its shape is not a rectangle. Actually, the very core of the temple is a rectangle, but two porches jut out from it on different levels.

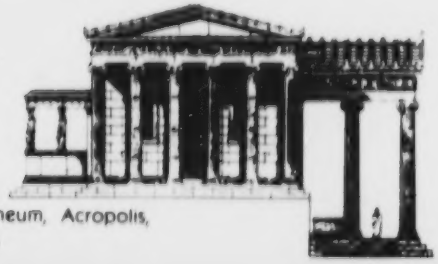
30 Porch of the Maidens, Erechtheum

This small porch faces the Parthenon. Can you tell what kind of columns it has? They are women who hold up the entablature on their heads. These women are called Caryatids. Vetruvius, the Roman historian, tells us that the Caryatids or Carions were a people who lived in Asia Minor, but who fought with the Persians against the Greeks at the naval battle of Salamis. When the Athenians won, they destroyed the cities of the Carions, killed all the men and brought back the women as slaves to Athens.

31 Porch of the Maidens, Erechtheum

As an act of revenge the Carion or Caryatid slave women were perpetuated in stone to hold up the entablature of the Erechtheum on their heads. Whether the story is true, the word has become part of our vocabulary, for any column in the shape of a woman is called a **caryatid.** Any column in the shape of a man is called an **atlas,** and if there are many of them, they are called **atlantes.** Luckily for the Caryatids the entablature is light for the roof is flat with no pediment.

32 Caryatid from Porch of the Maidens, Erechtheum



Erechtheum, Acropolis, Athens

As you can see the Caryatids are quite husky and the weight of the entablature is carried down from the top of their heads, through their straight leg, which is heavily draped. The vertical folds of their dress look very much like the flutes in a Doric column. Their other leg is slightly bent, giving the Caryatid a naturally graceful stance. The upward curve of their blouse, called a **peplos,** gives their bodies a springiness that is like the entasis in the Doric column. Entasis is the slight bulge in the Doric column that gives it bounce. Most people call this the Porch of the Maidens, it is easier to remember.

Caryatid from Porch of the Maidens, Erechtheum

33 Workmen making plaster casts of Caryatids

The pollution of Athens is even eating away the Caryatids. Here you see workmen taking plaster casts of the ladies which they will cast in cement.

34 Workmen making plaster casts of Caryatids

These cement copies will replace the original figures on the temple, which in turn will be placed safely in a museum.

35 North Porch of Erechtheum

This is the large porch on the Erechtheum which faces north. These are Ionic columns, like those we saw in the Temple of Athena Nike. Before we go further let us compare the Doric order with the Ionic order.

36 Doric and Ionic orders, diagram

There are definite differences between the Doric and Ionic orders. The most obvious difference is in the capitals. The Doric capital is rectangular, while the Ionic capital curves into a volute. The Ionic column is slimmer with finer, thinner flutes, and it does not have entasis or bulge. The Ionic column has a base, while the Doric does not. Everything about the Ionic order is lighter, more elegant and more decorative than the Doric. Even its entablature is smaller and less heavy.

37 Another view of North Porch of Erechtheum

We are again looking at the North Porch of the Erechtheum and you can see its curving capitals called volutes. Its Ionic columns do seem slimmer, lighter and more elegant than the Doric columns that we saw on the Parthenon.

38 Palace at Knossos, Crete, 1500 B.C.

Where did the Greeks get their ideas for the column? The columns we saw at Knossos in Crete did not look like a Greek column for they were thinner at the bottom than at the top.

39 Fluted column by Imhotep, Saqqara, Egypt, c2700 B.C.

This is probably the world's first fluted column and it comes from ancient Egypt and is dated around 2700 B.C. But it does resemble a Doric column. Archeologists believe that this fluted column was a copy in stone of the reeds that the Egyptians tied tightly into bundles and pressed into the wet mud walls of their houses and palaces to reinforce them.

40 Wall painting from Menna's Tomb, Luxor, Egypt, c1900 B.C.

In this wall painting from an Egyptian tomb we see flowering papyrus plants that grew along the Nile River.

41 Papyrus columns by Imhotep, from Saqqara, Egypt, c2700 B.C.

The Egyptians copied this papyrus plant in stone, creating a stone column with a blooming plant capital. This plant capital may have been the model for the Greek Ionic capital. This column does not stand alone, but is pressed against the wall to reinforce it. We call a column that leans against a wall an **engaged column.**

Ionic Column

42 Ram's Head, a Rhyton, gold, Persian, c500 B.C.

Greek ships not only visited the cities of ancient Egypt but also traveled to Asia Minor. Here they were also influenced by the decorative and ornamental art from the Orient. The Ionic capital looks very much like the curling, decorative horns of this gold Ram's head drinking cup, from Asia Minor.
It was the Egyptians, then, not the Greeks who invented the column, but it was the Greeks who perfected it.

43 Temple of Olympian Zeus, Athens, Hellenistic, 131 A.D.

Below the Acropolis and in the heart of Athens is the Temple of Olympian Zeus. While the building of this temple was started and stopped over a long period it was finally completed by the Roman ruler Hadrian in 131 A.D. These are Corinthian columns, the third and last Greek order.

44 Corinthian column from Temple of Olympian Zeus

The capital of the Corinthian column looks like an inverted bell, covered with curling shoots and leaves of the acanthus plant. They almost seem to sprout from the top of the column's shaft.

45 Another view of Temple of Olympian Zeus showing scale

The scale of these columns is huge. How would you feel standing next to them?

Corinthian Column

46 Greek and Roman orders, drawing

We see here all three of the Greek orders. Perhaps you can see that the Corinthian order seem to combine both the Doric and Ionic orders. It has the grand majesty and bigness of the Doric order, but the decorative elegance of the Ionic. Its columns are as thick and tall as the Doric, but they have the slimmer flutes of the Ionic. And there is no entasis. Like the Ionic, the Corinthian has a decorative plant capital and a base. Its entablature is as thick and heavy as the Doric but, like the Ionic, it has decorative ornamentation.

47 Roman columns from Sunion

When the Romans conquered Greece they adopted the Corinthian column. On some columns they removed the flutes, making the shaft smooth, but they made the capitals even more ornate. For the Romans the Corinthian order embodied the grandeur and majesty with which the Roman emperors wished to impress their people.

48 20th century house with Doric columns

In your town or city have you noticed any Doric, Ionic or Corinthian columns? What about the courthouse, the bank or the columns on your neighbors front porch?

49 Capitol Building, Washington, D.C. by Thomas Walter, Greek Revival, 1863 A.D.

The Capitol Building in Washington, D.C. was built just a little over a hundred years ago. It also has Corinthian columns. Of course, the Greeks did not use the dome, for the dome was a Roman invention. But it does have a pediment with sculptured figures inside it, just like the Parthenon.

50 Pediment of Capitol Building, by Paul Bartlett, "Democracy Protecting the Arts of Peace" Greek Revival, 1863 A.D.

This scene from the pediment is called "Democracy Protecting the Arts of Peace." Except for the center figure all the figures are dressed in the everyday clothes of the 19th century. The figure of Democracy in the center does look a bit silly in his toga. This recopying of the Greeks in the 19th century is called a Greek Revival. Some people think it is foolish to try and show ideas of our own time in the style of a bygone age like ancient Greece. Do you think it gives the building dignity or do you think it is phony?

51 Theatre at Epidaurus, Greece, Classical

Besides the Greek orders and temples we can thank the Greeks for one more thing, that is the theatre. Did you know that they originated the theatre design stilled used by us today in our movie theatres and auditoriums? In every important Greek city there was usually a Greek theatre. The largest is at Epidaurus where it is still used for summer theatre today.

52 Theatre at Delphi, Classical

The most mystical and mysterious theatre was at Delphi, where the rising mists half shroud it, and the Oracle of Delphi once sat nearby, breathing in the fumes from the crack in the earth, predicting dire futures for Greece.

53 Acropolis, Athens at Night

With the help of modern flood lights this is the Acropolis at night. Using the simplest kind of construction, post and lintel, and an equally simple type of ground plan, the Greeks designed such magnificent temples that we still borrow from them today. While the function of their buildings was to glorify the gods. we today, often use at least one of the three Greek orders on our public buildings, even though our function is totally different.

54 The White House, Washington, D.C. by James Hoban, Greek Revival, 1915

While our elevations look very Greek, they are not totally so, for we must have windows. We, afterall, use the interiors of our buildings, unlike the Greeks, and need windows for light. While we have copied so much from the Greeks, never has the perfection of harmony, scale, proportion and balance of the Parthenon been equalled.
We will end with a question. What are the six elements of architecture? **Function, ground plan, elevation, construction, materials** and **scale** or **proportion.**

55 Acropolis at Night (The End)

The way in which they are put together adds up to **design.**

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Discussion:

Greek Architecture 2

1. Are there any buildings in your area that have Doric, Ionic, or Corinthian columns?

2. Do you think the scene from the pediment of the Capitol Building "Democracy Protecting the Arts of Peace," gives the building dignity? Do you think it is phony to present ideas of today in the style of the past?

3. How do the theatres of ancient Greece compare to our theatres of today?

4. Ancient Greek temples told of their beliefs and religion through sculpture. How do contemporary places of worship illustrate their beliefs?

5. Do you think modern architecture embodies the harmony, scale and balance of the architecture of ancient Greece?

ANSWERS TO QUIZ NUMBER 1
GREEK ARCHITECTURE 1

1.-O
2.-P
3.-N
4.-R
5.-K
6.-L
7.-M
8.-I
9.-J
10.-H
11.-D
12.-E
13.-F
14.-Q
15.-B
16.-C
17.-A
18.-G

ANSWERS TO QUIZ NUMBER 3
GREEK ARCHITECTURE 2

1.-D
2.-I
3.-L
4.-H
5.-B
6.-G
7.-J
8.-O
9.-P
10.-A
11.-F
12.-Q
13.-C
14.-R
15.-E
16.-K
17.-M
18.-N

SPACE FOR NOTES AND COMMENTS:

19

Student Sheet

ANCIENT GREEK ARCHITECTURE 2

1. Title: Ancient Greek Architecture II, Temple of Athena Nike, Acropolis, Athens, Classical

2. Family photograph

3. Parthenon, Acropolis, Athens, Classical, 447 B.C.

4. Interior of Parthenon showing frieze on cella of Panathenaic Procession

5. Detail of frieze showing Animals Being Led to Sacrifice, by Phidias, Classical, 432 B.C.

6. Horses and Riders from Panathenaic Procession by Phidias, Classical, c432 B.C.

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12. Restoration drawing of east pediment of Parthenon

13. — 15. Dionysos or Heracles from east pediment of Parthenon by Phidias, Classical, now in British Museum in London, c432 B.C.

16. — 17. Three Goddesses from east pediment of Parthenon by Phidias, Classical, now in British Museum, London, c432 B.C.

18. The Moon Goddess Selene's Horse, east pediment of Parthenon, by Phidias, Classical, now in British Museum, London, c432 B.C.

19. Restoration drawing of Acropolis after G.P. Stevens

20. Propylaea, Acropolis, Athens, by Mnesicles, Classical, c437 B.C.

21. Lion's Gate, Mycenae, 1300 B.C.

22. — 23. Another view of Propylaea

24. — 26. Temple of Athena Nike, by Callicrates, Classical, c432 B.C.

27. Erechtheum, Acropolis, Athens, by Mnesicles, Classical, 421 B.C.

28. Contest between Athena and Poseidon

29. Drawing of Erechtheum

30. — 31. Porch of the Maidens, Erechtheum

32. Caryatid from Porch of the Maidens, Erechtheum

33. — 34. Workmen making plaster casts of Caryatids

35. North Porch of Erechtheum

36. Doric and Ionic orders, diagram

37. Another view of North Porch of Erechtheum

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38. Palace at Knossos, Crete, 1500 B.C.

39. Fluted column by Imhotep, Saqqara, Egypt, c2700 B.C.

40. Wall painting from Menna's Tomb, Luxor, Egypt, c1900 B.C.

41. Papyrus columns by Imhotep, from Saqqara, Egypt, c2700 B.C.

42. Ram's Head, a Rhyton, gold, Persian, c500 B.C.

43.— 45. Temple of Olympian Zeus, Athens, Hellenistic, 131 A.D.

46. Greek and Roman orders, drawing

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51. Theatre at Epidaurus, Greece, Classical

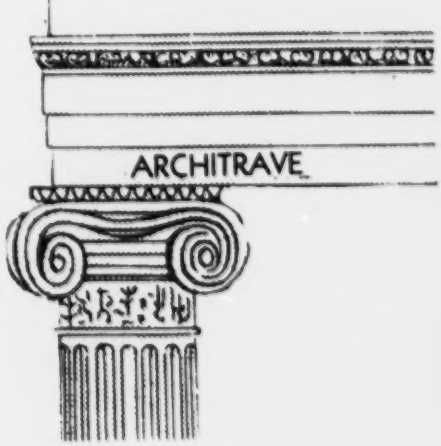
52. Theatre at Delphi, Classical

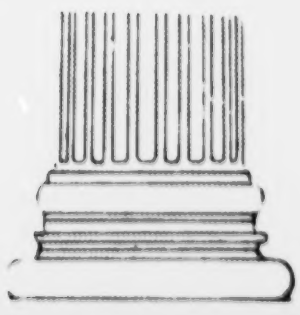
53. Acropolis, Athens at Night

54. The White House, Washington, D.C. by James Hoban, Greek Revival, 1915

55. Acropolis at Night (The End)

CORINTHIAN ORDER





IONIC ORDER

3 STYLOBATE

Student Sheet

Greek Architecture 2
Quiz No. 3

1 _____Panathenaic Procession

2 _____East pediment of Parthenon

3 _____Phidias

4 _____Sculpture in high or in raised relief

5 _____Sculpture in the round

6 _____Propylaea

7 _____Ionic column

8 _____Doric column

9 _____Caryatid

10 _____Temple of Athena Nike

11 _____Erechtheum

12 _____Origin of first stone column

13 _____Ornamental art of Asia Minor

14 _____Greek Revival

15 _____Largest Greek Theatre

16 _____Most important part of Greek Temple

17 _____Most important part of a Greek Revival building used today

A. Small temple with Ionic columns near the entrance of Acropolis, Athens

B. Figures that you can walk around

C. Origin of decorative designs on Ionic order

D. Procession held every four years in Athens in honor of Athena

E. Located at Epidaurus, Greece

F. Temple where supposedly, the contest between Athena and Poseidon, for possession of Athens took place

G. Building at entrance to Acropolis, at Athens, with Doric columns

H. Stone is cut away behind figures leaving them raised up

I. Birth of Athena from the head of Zeus

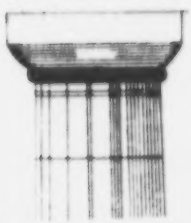
J

K. Exterior

L. Sculptor of figures on the Parthenon such as Dionysos and the Three Goddesses

M. Interior

N. Corinthian column

O 

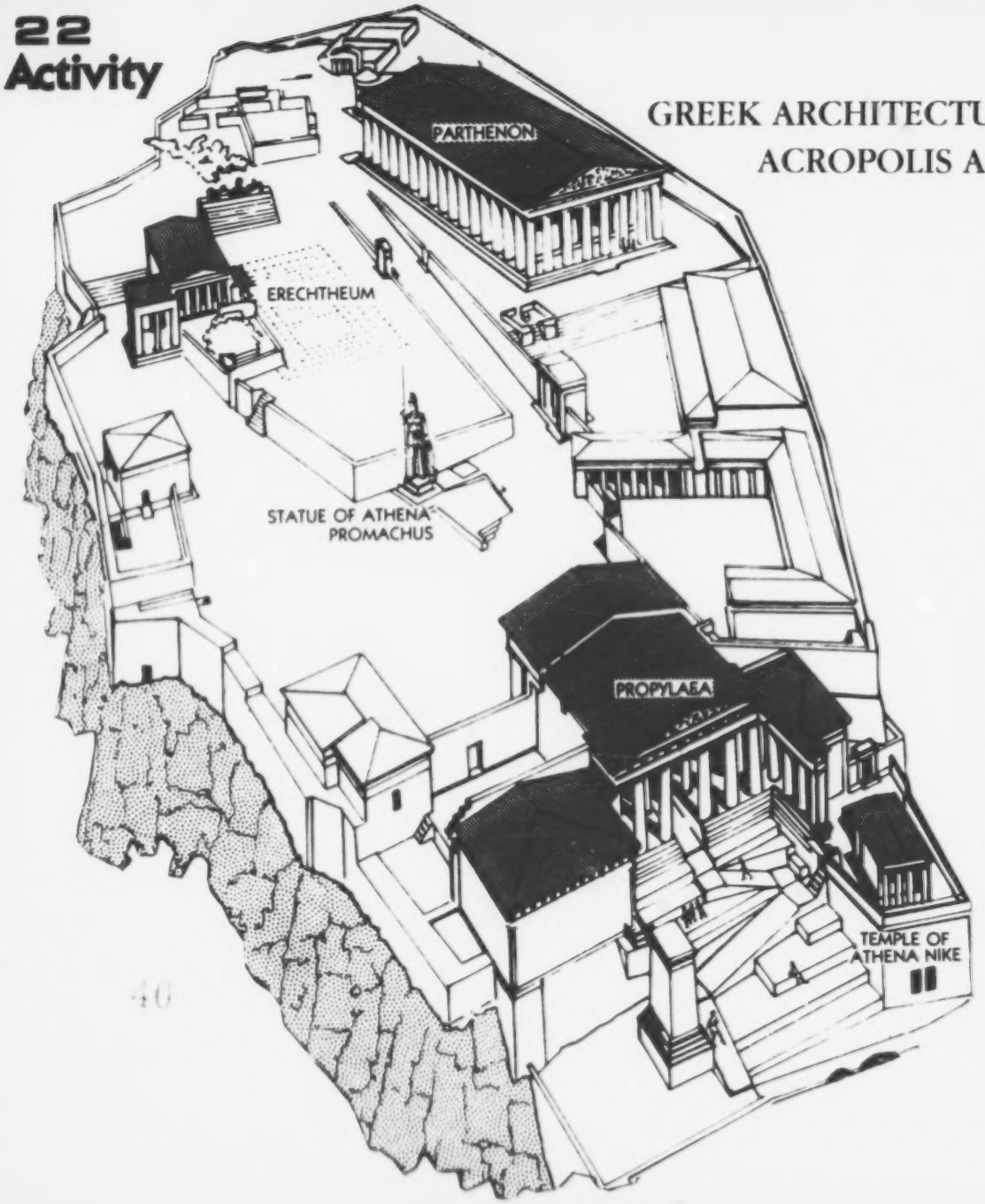
P. A column in the shape of a woman

Q. Egypt

To be xeroxed for each student

22 Activity

GREEK ARCHITECTURE: ACROPOLIS AT ATHENS



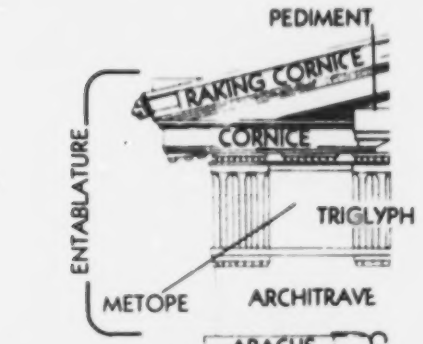
Reconstruction drawing of Erechtheum

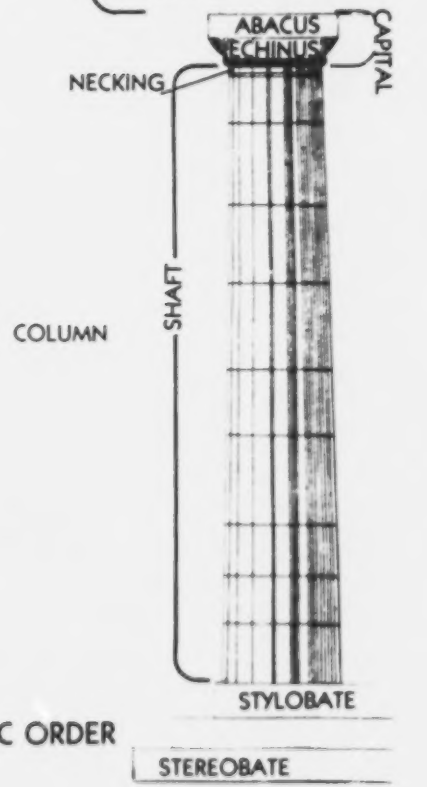
SUGGESTED ACTIVITY:

1. Make a model of the Acropolis at Athens out of cardboard or paper mache. Be sure the columns on the Parthenon and the Propylaea are Doric. The columns on the Temple of Athena Nike should be Ionic. The main part of the Erechtheum is also Ionic (see drawing on the right), while the columns on the Porch of the Maidens are Caryatids (women).
2. Have the students make a separate model of the way the Erechtheum might have looked in 430 B.C.

GREEK ARCHITECTURE: THREE GREEK ORDERS

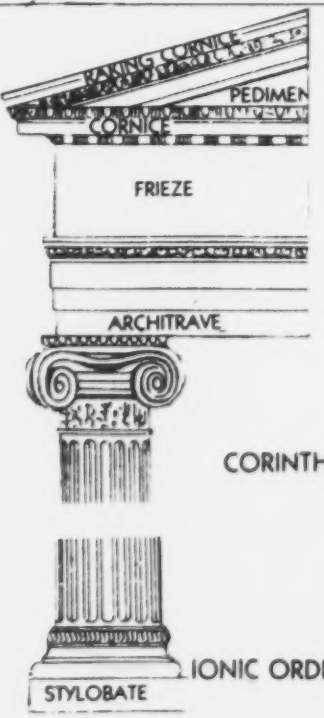
Activity

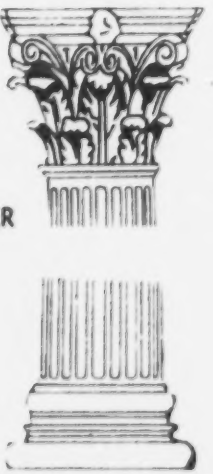




SUGGESTED ACTIVITY:

1. These are the three Greek orders: Doric, Ionic and Corinthian. Take a walking tour around your town or city and record the different buildings that have Greek columns and their type. Record also the *function* of each building, their *materials, construction,* and what the outside of the building looks like, or its *elevation*. Lastly, record what its *scale* is in relation to you.
2. The caryatid or woman held up the roof of the Porch of the Maidens on the Erechtheum. In your walking tour try to find any odd kinds of columns, or even figures that are used as columns. Remember that a man who is used as a column is called an *atlas*, while the woman is called a *caryatid*.





CARYATID from Porch of the Maidens, Erechtheum.

24 GREEK ALPHABET

A α alpha a (a)	H η eta e (a)	N ν nu n (n)	T τ tau t (t)
B β beta b (b)	Θ θ theta th (th)	Ξ ξ xi x (ks)	Υ υ upsilon y (u, oo)
Γ γ gamma g (g)	I ι iota i (e)	O ο omicron o (o)	Φ φ phi ph (f)
Δ δ delta d (d)	K κ kappa k (k)	Π π pi p (p)	X χ chi ch (k, k)
E ε epsilon e (e)	Λ λ lambda l (l)	P ρ rho r, rh (r)	Ψ ψ psi ps (ps)
Z ζ zeta z (z)	M μ mu m (m)	Σ σ s sigma s (s)	Ω ω omega o (o)

Activity

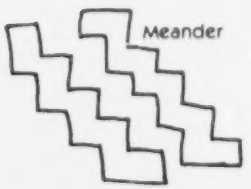
SUGGESTED ACTIVITY:

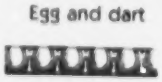
1. These letters of the Greek alphabet are certainly different from our own. Many fraternities, sororities and secret societies use Greek letters for their names instead of our alphabet. Have the students ask their teachers, parents or friends the names of ones they know. Have the students write these letters on the blackboard. Have them write their own names phonetically, with Greek letters.

GREEK DESIGNS

SUGGESTED ACTIVITY:

1. Below are some Greek designs that have come from different Greek vases. Ask the students to bring in from home fabrics, book covers, pages from magazines or even clothes that have these same designs and are used by us today.





Glossary

Acropolis — Citadel high above a Greek city.

Archaic Smile — The smile on the faces of sculptures carved during the Archaic period, c 570 B.C.

Atlas — Column in the shape of a man.

Caryatid — Column in the shape of a woman.

Cella — Room in Greek temple where the statue of the God or Goddess was placed. Also called the naos.

Colonnade — Rows of columns.

Contraposto Pose — Hipshot pose with shoulders and hips tilted in opposite directions.

Elevation Drawing — Drawing of the outside view of a building.

Entasis — The slight bulge in a Doric column that gives it springiness.

Flutes — Vertical grooves in a column.

Ground Plan — Diagram of the rooms in a building.

Krater — A Greek vase.

Megalithic — Huge rocks.

Naos — Also called the cella. Room where statue of God or Goddess was placed inside a temple.

Pediment — The triangular space above the beam or lintel, formed by the peak of a roof.

Post and lintel — Two posts hold up a beam or lintel.

Raised Relief — Sculpture where the background is cut away leaving the figures raised up.

Scale — Size of a building in comparison to you.

CONSULTANTS

Dr. John Hoag has been Professor of Art History at the University of Colorado in Boulder since 1965. He graduated from Harvard in 1941 and received his Ph.D. from Yale in 1958. From 1956 to 1965 Dr. Hoag not only taught at Yale but was also Art Librarian. He is the author of "Islamic Architecture," published by Harry Abrams, 1977, and "Western Islamic Architecture," published by George Braziller in 1963.

Dr. Hoag worked very closely with Ann Campbell Luce as head of her thesis committee, when she first began working on the project in 1973, because he felt there was an urgent need for bringing art history into the school classroom. He still insists on checking all the information included in the multi-media kits.

Phyllis Clark has been an elementary teacher at the Heatherwood School in Boulder, Colorado for ten years, where she teaches sixth grade. She is currently Content Area Resource Teacher (CART) for Elementary Social Studies for Boulder Valley Schools. Because of her creative and innovative approach to teaching, Mrs. Clark has contributed to the writing of many guides for social studies in elementary education. In particular she authored "Crossroads of the West," a teaching guide, published by Pruett Press. She has been actively involved in teacher training in economics, social studies, and legal education all across Colorado.

Willis Knierim, who teaches at Centaurus School in Lafayette, Colorado, is Content Area Resource Teacher (CART) for Middle Level Social Studies in the Boulder Valley Schools. As consultant in social studies, he chaired the Help Mobile, CEA's mobile school, at all grade levels, setting up workshops in individual areas. Mr. Knierim received his master's degree in Public Administration, and has served in numerous public agencies on special projects. His curriculum material has been used throughout the United States, which includes "Teaching the Constitution." In addition to writing curriculum material, he created audio visual material on international relations for the Taft Institute, at the University of Wyoming. Mr. Knierim grew up in India and spent much time in Asia.

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ALARION PRESS
Sound Filmstrip

Answers to Quiz(page 12)

1. A	5. A
2. B	6. B
3. B	7. B
4. A	8. A

TEACHER'S MANUAL

ANCIENT GREEK SCULPTURE

VIDEO / SOUND FILMSTRIP

HISTORY through ART and ARCHITECTURE

ALARION PRESS inc

MUSIC by Jonathan Baird

About the music in this unit:

While little is known about the sound of ancient Greek music, we know a good deal about its principles and ideals. Musical training on the lyre, a multi-stringed instrument was a major part of the education of young men. The musician often used the lyre, as well as the "kithara" and an early version of the harp, as accompaniment to verse. Probably phraseology was very close to that of spoken verse and repetition with variation an integral part of musical values. Instrumental proficiency was not highly regarded; rather the artistic expression and depth of feeling were considered the most worthy in Greek music.

Pure melody, without chordal accompaniment, was the basis of their music, and to our own ears this might have sounded a bit thin. While there was no theory of harmony per se, there was careful attention to the system of harmonic intervals, which was considered a related field to Pythagorian geometric studies and reflected positions of the stars and planets in the ancient heavens. The Greeks did understand the use of modes and distinguished between the more Asian melodies such as those composed in the Phrygian or Lydian modes, which tempted and undermined the character, and those in the Dorian mode, austere and virtuous. Dorian melody was thought to enhance military and civic spirit and was the more formal state-approved sound. Like our own popular music today, however, these other melodies remained part of the culture and crept into less formal use such as dance and celebration.

While stringed instruments were an important part of Greek music, there was also extensive use of reed type flutes, especially as background to the "symposium" drinking parties; trumpet-like instruments for use in war, and especially vocal music, not only in the theatre, but in te omnipresence of the "bard" or traveling poet, who would sing the legends of the gods and the glorious past.

The pieces in this unit represent some of this diversity of expression, although they have been enhanced for our modern ears through the addition of harmonic interpretation which may have been assumed by the Greeks but not actually played. The first piece, set in the Dorian mode, might be a theme of Periclean order, possibly used during a civic invocation or building dedication. The second piece is a dance set in the Lydian mode that might have been heard at a private celebration or out in a village in the countryside. The third piece is also in the Dorian mode and is set in a military context, as a memorial for those killed in combat and inspiration for new feats of courage.

TEACHER'S MANUAL

ANCIENT GREEK SCULPTURE

Written and illustrated by Ann Campbell

VIDEO/SOUND FILMSTRIP

CONSULTANTS:

Jeanne DuPlan Lee, Chairman of the Social Studies Department of Boulder High School, Boulder, Colorado

Dr. John Hoag, Professor of Art History, University of Colorado, Boulder, Colorado

Concept:

HISTORY THROUGH ART AND ARCHITECTURE Sound Filmstrips were developed as a unique program to expand a student's horizon in history. In learning about the art and architecture of a period, a student not only finds visual pegs on which to hang facts and dates, but often discovers, to his or her amazement, that today is merely a new twist on ancient history.

When a student sees a column, a clerestory window, a sculpture in relief, or even a friend standing in a "contraposto" pose, he is seeing ancient history repeated in his own time.

A student's personal ideas and experiences are continuously related to those of past periods. For the gifted student, whole new worlds are opened up. For the slower learner, his or her eyes are opened and he will suddenly SEE what he never noticed before.

Special music, using the Greek Dorian and Ionian modes, has been composed by Jonathan Baird for this filmstrip.

This program was created and developed by Ann Campbell, and used at Boulder High School over a six year period by Jeanne Lee, Chairman of the Social Studies Department.

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Contents:

ANCIENT GREEK SCULPTURE

1–2	Concept, Use and Instructions
3–7	Script of Greek Painting and Sculpture 1
8	Quiz # 1 (to be reproduced for each student)
9–10	Student Sheet (to be reproduced for each student)
11–15	Script of Greek Sculpture 2
16	Discussion Questions; Answers to Quizzes 1,2 & 3
17–18	Student Sheet (to be reproduced for each student)
19	Quiz # 2 (to be reproduced for each student)
20–23	Student Classroom Activities (reproduce as needed
24	Fun Quiz (Quiz #3)
25	Consultants and Bibliography

Instructions for Filmstrip

1 Advance filmstrip to FOCUS frame, adjust

2 Advance filmstrip to next frame

3 Start cassette

4 a For automatic equipment use side 1 of audio-tape cassette. Narration is cued with inaudible signals. Filmstrip advances mechanically.

4 b For manual equipment use side 2 of audio-tape cassette. Narration is cued with audible signals. Advance filmstrip one frame at each audible signal.

Running time: approximately 18-19 minutes.

To present filmstrip at varied pace, omit cassette and deliver narration in person.

Use:

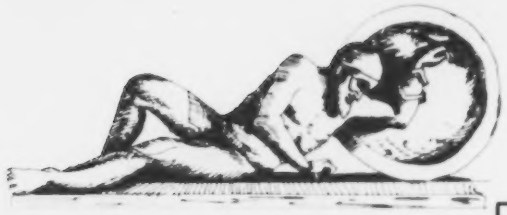
For best results please follow the suggested program below:

PRIOR TO SHOWING VIDEO OR FILMSTRIP:

1. Please reproduce both sides of the STUDENT SHEETS (pages 9-10 and pages 17 and 18) for each student. The STUDENT SHEETS include terms, diagrams, identifications and dates of each frame.
2. Reproduce any QUIZZES you wish to use.
3. Please have the students do the ACTIVITIES on pages 20 - 23 and reproduce any you need. By DOING what he or she has just seen on the screen, the student learns and retains far more. His or her horizons are greatly expanded.
4. We ask that you be SURE to do the suggested ACTIVITY before showing each video or sound filmstrip. Each activity personally involves the student and helps him or her into the past in a way that he or she can understand.

. AFTER SHOWING VIDEO OR FILMSTRIP:

1. At the end of each script there are discussion questions (page 16) aimed at sparking student participation.
2. If you intend to show two videos or two filmstrips in one class period, we suggest that you give each student a copy of the multiple choice FUN QUIZ on page 24 to do while you are changing the program. We find humor an excellent teacher.
3. The more serious quizzes are specifically designed to reinforce their new knowledge rather than tax it.



ANCIENT GREEK PAINTING and SCULPTURE 1

1 Title: Ancient Greek Painting and Sculpture I. Dying Warrior, Late Archaic, Temple of Aphaia, Aegina, c490 B.C.

ACTIVITY BEFORE FILMSTRIP:
Have each student take a piece of paper from their notebook. Do they find it interesting? Have them crumple the paper. Where the paper has indentations it has dark shadows. Now have them pull out and twist the paper. Ask them what creature they can see now or imagine in their twisted piece of paper. This exercise will show that in order for sculpture to be interesting, it must have a play of light and dark and lines of action.

2 Horses, Archaic, Acropolis Museum, Athens, c600 B.C.

What is sculpture? Sculpture is a copy of something carved from some kind of material. It could be an animal or a person that has been copied in clay, stone, metal or even plastic.

3 Horse, Archaic, Acropolis Museum, Athens, c600 B.C.

Let us say you are riding this horse bareback. When you hold him back you feel his taut, eager muscles quiver under your legs. When you let him run he is all power and movement.

4 Dog, Archaic, Acropolis Museum, Athens, c600 B.C.

Or let us say you try to hold a squirming dog like this one. He, too, is never still. How can you take something alive and copy it in static, rigid stone? How can it be made full of life and movement?

5 Piece of lined paper.

Let us take a piece of paper, lined or unlined. It is static. Light falls on the paper flatly.

6 Crumpled piece of paper.

But when you crumple the paper it becomes something else. Light strikes the ridges while the shadows darken the indentations.

7 Twisted piece of paper.

Now we take the same piece of paper, pull it out and twist it. Suddenly your imagination is kindled by the play of light and shadow. Now it could be a dragon, a reptile, or a prehistoric bird.

8 Serpent, Archaic, Acropolis Museum, Athens, c580 B.C.

We see then, that in order for sculpture to be interesting it must have a play of light and shadow on its surface and in order to be lifelike it must have some kind of action lines or movement.

9 Bull's Head, Rhyton, Ritual drinking cup, Minoan, from Palace of Knossos, Crete, c1500 B.C.

Around 1500 B.C. on the island of Crete there lived a sophisticated society, called the Minoans. Here the people worshipped animal gods and goddesses. Found in the Palace of Knossos, Crete, was this head of a charging Bull with golden horns. Actually, this was a ritual drinking cup called a rhyton, for you can see the lip of the cup under his horn. The bull's nostrils quiver, his beady eye looks at you with suspicion, but it is the curving, golden horns that give it life and action.

10 Snake Goddess, Minoan, Palace of Knossos, Crete, c1500 B.C.

Also from Crete is this bare bosomed, ceramic Snake Goddess. Her lifelike action comes from her outstretched arms and hands that hold curling snakes. Her bird hat, her flounced skirt, bare breast and cinched in waist were obviously the fashion of the day. What makes the surface of this figure so alive? The ceramic tiers of her skirt have been deeply undercut, creating a play of light and shadow.

11 Somersaulting Toreador, painting, Minoan, from Palace at Knossos, c1500 B.C.

This extraordinary painting from the walls of the Palace at Knossos is all action. The powerful bull leaps, while the Toreador somersaults into the air over his back. On the left a lady grabs the bull's horns and is about to flip over the bull's head, while

the lady on the right has just completed her dangerous somersault. Look how the whiplash line of the bull's twitching tail is repeated in the twisted legs of the somersaulting Toreador. Sometimes it is easier to see lines of action in painting than in sculpture.

12 Citadel at Mycenae, c1300 B.C.

When the Mycenaean traders settled in Greece around 2000 B.C. they built a great citadel at Mycenae, high on a hill overlooking the sea. Here in recent years, archeologists discovered some royal tombs abounding with gold objects.

13 Death Mask, beaten gold, from Mycenae, c1300 B.C.

This death mask of beaten gold once covered the face of a newly dead king of around 1500 B.C. Some say it might be Agamemnon. The thin sheet of gold was hammered and bent into a likeness of the dead king. Its lifelike excitement comes from the dark shadow of the two powerful curves that frame the eyes and nose and the downward curve of the disgruntled mouth. A pattern of prickly lines form the eyebrows and hairy beard.
But the gold of the Mycenaeans lasted only until the Dorians invaded and destroyed their citadel in 1100 B.C. The art of these early Greeks was very different from the Minoans and the Mycenaeans.

14 Greek Geometric Krater, Archaic Greek, c700 B.C.

This fat vase, called a krater, was made by the Dorian Greeks around 700 B.C. Do you think the men and horses painted on this pot are natural looking? Actually, the men and horses are angular stick figures and look like they are walking on tall, skinny stilts. Whenever a pattern or design is made from something realistic, we call it **stylized.** Here these stylized, angular figures are no more important than the geometric designs on the rest of the vase. This kind of design is called **geometric.** The design in the center band is called a **meander.** Below it is a **zig-zag,** while beneath it is a **scroll** design.

Greek key design

15 Fabric decorated with Greek Key design.

Have you ever seen some of these designs on buildings, on borders of clothes, fabrics, or objects? This is a Greek Key design.

16 Hitler in Germany, wearing Swastika armband, 1933.

You probably already know that the German **swastika,** the symbol of Nazi power in World War II, came from a Greek Geometric vase.

17 Greek Amphora vase, Oriental style, Archaic, from Rhodes, 6th C. B.C.

Not all early pots had geometric designs. Some had sinuous curves, which we call **Oriental,** such as on this amphora. Perhaps the curving designs remind you of an Ionic capital.

18 Greek Twins, Cleobis and Biton, Archaic, Delphi Museum, c600 B.C.

Early Greek sculpture was also stiffly geometric and stylized. These two young, athletic Twins, Cleobis and Biton, have the bodies of the ideal, male athlete, but to us they look stiff, blocky and rectangluar. Their rib cages are stylized into a curving line simply drawn on the surface, while their knees are circles within circles. Not only are their bodies symmetrical, their clenched fists identical, but their weight is centered evenly on both legs, with one leg slightly forward as if they were walking. It would be difficult to imagine them doing somersaults.

19 Ranofer, 5th Dynasty Tomb, Old Kingdom, Saqqara, Egypt, c2500 B.C.

Where did the Greeks get the idea for this blocky figure? The early Greeks sailed often to Egypt. This statue of Ranofer, an Egyptian nobleman, of around 2500 B.C., is in the same walking pose as Cleobis and Biton. He, too, is rectangular and in fact, is still attached to his rectangular stone block. While their poses are the same, there is a basic difference between Greek and Egyptian sculpture.

20 Portrait head of Ranofer.

Egyptian sculpture was an art for the dead. The statue, a portrait likeness, was a substitute for the dead body, where the ka or soul might return each night. Incidentally, an Egyptian nobleman was never shown nude for nudity was the badge of slavery.

21 Cleobis and Biton.

Greek sculpture was an art for the living for the statue was a portrait of the body, the ideal, youthful body of the athlete, who was almost always shown nude. An Egyptian statue was locked in a man's tomb, while a Greek statue was there for all to see and marvel at.

Kouros from Anavyos, Archaic

22 Close up of Cleobis and Biton

23 Calfbearer, Archaic, Acropolis Museum, Athens, c570 B.C.

24 Detail of Calfbearer

25 Kouros from Anavyos, Archaic, Athens National Museum, c525 B.C.

26 Heracles Strangling the Nemean Lion, black figured amphora, painted by Psiax, Archaic, Museo Civico, Brescia, c525 B.C.

27 Detail of Heracles and Nemean Lion.

Heracles Strangling the Nemean Lion, black figured amphora

28 Hera of Samos, Archaic, Louvre, Paris, c575 (on left) Doric Column (on right)

29 Kore from Chios, Archaic, Acropolis Museum, Athens, c530 B.C.

Just as there were geometric patterns on the Greek vase, so are there patterns here. The Twin's hair has been stylized into circles and their eyes into ovals.

This wonderfully human statue of the Calfbearer shows a young shepherd carrying a helpless, newborn calf on his shoulders. Both man and animal are fused into one. Just as with Cleobis and Biton, the hair of the shepherd and the wooly coat of the calf have been stylized into a pattern of circles.

The shepherd's eyes, beard, nose and mouth are also stylized, but now the eyes seem to have real expression. The artist drilled deep holes into the eyes with a bore. But what about the smile on his face. It is as if the Calfbearer and his calf have a private joke between them that they have not shared with us. This rather special smile is called the **Archaic Smile** and we will see more of it.

This ideal, male figure called a Kouros, was carved around 525 B.C., about 75 years after the Twins. As you can see his body is taller and more natural looking. Although he is still symmetrical and stands with his weight centered on both legs, he looks much more human. His muscles, ribs and knees are no longer drawn on the surface, but are now part of his body, for his legs, thighs, hips and torso seem to flow together. This is really a portrait of the perfect male body. Does he have an Archaic smile? By all means.

Here is a black figured amphora pot used for carrying wine or oil. On it is painted the mythological story of Heracles Strangling the Nemean Lion. Enraged at Heracles because he was Zeus' son but not hers, the Goddess Hera, wife of Zeus, sent snakes to kill the baby. Heracles choked them. Later she drove him mad and he murdered his own family. To atone for his deed he had to do twelve Herculean tasks, one of which was to strangle the Nemean Lion, who was immune to spears and arrows.

Unlike the Geometric Style vase we saw earlier, man and beast combine to form a single violent action in their death struggle. Whoever loses must die. This vase is called **black figured** because black slip, a thin mixture of clay and pigment, was applied to the already fired, red clay pot. The artist then scratched out the design with a sharp point, letting the red, clay ground show through. The pot was then refired. Here Heracles and the Lion are more important than the other decorative designs.

On the left is what is believed to be Hera of Samos, the eternally jealous wife of Zeus. This statue was found in the Temple of Hera on the island of Samos. She once measured 6 feet 4 inches tall. The goddess is one continuous flow of moving lines. The folds of her cape form a fine pattern on incised lines that allow her body to show through underneath. The repitition of vertical lines in the pleats of her tunic make her look like the fluted column on the right. Her large toes are part of its base. Of course, without her head we cannot see if she, too, had an Archaic smile.

It doesn't seem quite fair that this young girl, called a Kore, had to wear clothes, when the young men did not. Her body was not considered an ideal of beauty, but her Archaic smile bursts with life. Her pose is no longer stiff and symmetrical and actually seems to have a slight swing to it. Her arms are now bent and her hands were certainly not clenched. Even her clothes move across and around her body. Her loose fitting tunic hangs at different levels and its edges were painted with encaustic. Encaustic is a mixture of wax and paint pigments that is applied to a surface while it is hot. The Greeks often highlighted with encaustic paint the eyes, faces and edges of drapery in their sculpture.

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6

Kore from Chios, Archaic

30 Temple of Aphaia, Late Archaic, Aegina, c490 B.C.

In an earlier filmstrip we saw this Temple of Aphaia on the island of Aegina.

31 Reconstruction drawing of east pediment of Temple of Aphaia, Aegina, c480 B.C.

From bits and pieces archeologists have pieced together what they believe the east pediment of this temple once looked like. The Goddess Athena stands in the center while mythological Greeks and Trojans fight each other. For the first time we see action translated into stone.

32 Heracles, Late Archaic, from Temple of Aphaia, Aegina, now in Munich Museum, c480 B.C.

We see here Heracles who has just dropped onto one knee to shoot a volley of arrows at the enemy. In the next second he will dash off again. His muscles strain as he pulls back the bow. It is the moment just before he lets fly the arrow. This time his clothes and hair are not stylized, but are natural looking. The flaps on his tunic overlap each other as they would in real life.

33 Head of Heracles

Can you see the head of the Nemean Lion on top of his head, sort of like a cap? This is how we know that he is Heracles.

34 Head of Heracles

The lines of his hair, eyebrows and nose form shadowed undercuts like the indentations on the crumpled piece of paper.

35 The Dying Warrior, Late Archaic, from Temple of Aphaia, Aegina, now in Munich Museum, c480 B.C.

This mortally wounded Dying Warrior, also from the Temple of Aphaia, struggles to rise. "I must go on," he seems to be saying. He is dying bravely, for he is a brave Trojan. His twisted body is partially supported by his shield but he no longer has the strength to lift it. Just like the Kouros, his body is that of the ideal male athlete.

36 Detail of Dying Warrior

On his face, deep undercuts mark the powerful curve of his eyebrows and the straight line of his nose. We are beginning to feel some real emotion here for this is a real tragedy. He is afterall, dying.

37 Detail of Dying Warrior

Do you think you might recognize him if you met him on the street? Probably not, for he is the ideal, brave warrior, not an individual.

38 Battle Scene from Greek vase, Late Archaic, c490 B.C.

While the subject of the pediment of the Temple of Aphaia is a mythological one of the Greeks battling the Trojans, it probably really represents the Greeks battling the Persian forces under Xerxes, who were attempting to conquer Greece at this time. Real heroes were being made at the battles of Marathon and Thermopylae. When Athens was sacked and burned in 480 B.C., the Greeks united behind the Athenians and defeated the Persians in the naval battle of Salamis. We call this span of the Persian wars the Transitional Period in Greek Art. It is a transition between Archaic Greece and Classical Greece.

39 Charioteer, Transitional period, Severe style, Delphi Museum, c470 B.C.

This Charioteer from Delphi once rode a chariot drawn by four horses. He stands with his toes gripping the floor of the racing chariot. One knee is slightly bent which gives his legs a springiness, rather like the springiness or entasis in a Doric column. He is like a skier riding the bumps or you in the back of a pickup truck. If his knees were locked like the earlier Kouros, he would be toppled over.

40 Another view of Charioteer

He wears the dress of a charioteer, girdled high and held in at the shoulders and back to keep it from flapping. While the folds are deeply undercut, there is still a feeling of a vertical pattern here, in the repetition of the pleats. But his body seems very real beneath his dress.

41 Detail of Charioteer hand

Like his hand holding the reins, the Charioteer is both stylized and natural looking. He is a transition between the Archaic style and the Classical. We call this the Severe Style.

Charioteer from Delphi, Transitional period, Severe style

42 Detail of Charioteer head

43 Model of Olympia, Olympia Museum

44 West pediment of Temple of Zeus, Transitional period, Severe style, Olympia Museum, c460 B.C.

45 Centaur Attacking Hippodamia, Transitional period, Severe style, west pediment of Temple of Zeus, Olympia Museum, c460 B.C.

46 Another view of Centaur and Hippodamia

47 Another view of Centaur and Hippodamia

48 Apollo, Transitional period, Severe style, west pediment of Temple of Zeus, Olympia Museum, c460 B.C.

49 Kouros from Anavyos

50 Poseidon, bronze, 7 feet tall, Transitional period, Severe style, National Museum, Athens, c460-450 B.C.

51 Detail of Poseidon

52 Heracles from Temple of Aphaia

53 Another view of Poseidon

54 Somersaulting Toreador, from Palace of Knossos, Crete

55 Cleobis and Biton

56 Charioteer from Delphi (The End)

What about his eyes? His eyes are made of glass paste and shaded by lashes of hairlike pieces of bronze. Many Greek statues had colored eyes but most of the coloring has fallen out.

Archeologists believe that Olympia, the site of the Olympic games and the Great Temple of Zeus, looked like this model during the 5th century B.C. Today, all that is left of the Temple of Zeus are some broken columns and stone stumps that mark where the temple columns had been. But a good bit of the pediment sculpture has been found and pieced together.

The god Apollo stands in the very center seemingly aloof while the mythological Lapiths and centaurs furiously battle each other on either side of him. During the wedding reception of the king of the Lapiths to the lovely Hippodamia, the rowdy centaurs, half man and half horse, became drunk and tried to run off with the bride and bridesmaids.

This Centaur has grabbed the bride and is trying to make off with her. A revolted but still dignified Hippodamia is trying to push away his hands.

Incredibly her face is remarkably calm in the face of what looks to be certain rape. If it were you, wouldn't you be yelling for help?

These figures are in more complicated poses than any we have seen so far.

Here is Apollo commanding the scene. Drapery falls from the god's shoulder in natural folds and his body and muscles, while not in action, look flexed and ready for action in case it is needed. But his hair looks like a wig, for it is stylized into stiff, beauty parlor curls. This is also called the Severe style.

When you compare Apollo to the earlier Kouros you can see that he is much more natural looking.

This bronze statue of the great God Poseidon stands 7 feet tall and was modeled around 460 B.C., long after the defeat of the Persians at Salamis. It was found by divers in the sands off the coast of Greece only 50 years ago. It is the moment just before he flings his forked trident at some unseen enemy. The muscles in his body are tightened and flexed for the throw. The natural play of light and shadow across his form makes him seem alive.

His face has the quiet dignity of a great god, aloof and above human bickering. You could hardly take him for anyone less than a god. Poseidon is also in the so called Severe style.

Like Heracles or the Dying Warrior from Aphaia he is ready to take on the Persians, should they return.

Poseidon is one of the great masterpieces of Transitional Greek art. His action comes from the outspread arms and the diagonal of his right leg.

We have gone from the action of the Minoan sculpture and painting on the island of Crete in 1500 B.C.

through the blocky, rectangular figures of early and late Archaic style to the more natural looking figures of the Transitional period, or Severe style. But all the sculpture we have seen has had some kind of play of light and shadow. Just like the crumpled, twisted pieces of paper, they have all had, to a varying degree, a surface excitement of light and dark, and lines of action and movement.

The end.

Quiz

Greek Painting and Sculpture 1
Quiz No. 1

1 _____ Greek key (design)
2 _____ Egg and dart (design)
3 _____ Encaustic
4 _____ Sculpture
5 _____ Minoans
6 _____ Rhyton
7 _____ Krater
8 _____ Stylized
9 _____ Meander (design)
10 _____ Nemean Lion
11 _____ Black figured
12 _____ Oriental (design)
13 _____ Battle of Salamis
14 _____ Zig zag (design)
15 _____ Transitional Period
16 _____ Scroll (design)
17 _____ Severe Style
18 _____ Swastika
19 _____ Centaur

A Period between Archaic Greece and Classical Greece

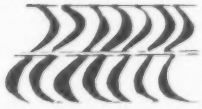
B Half man, half horse

C

D Where the Greeks and Athenians defeated the Persians

E What Heracles strangled and later wore on his head

F Type of sculpture done during the Transitional Period

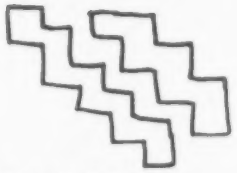
G 

H Mixture of wax and paint pigments applied to surface while still hot

I Sophisticated society that lived on Crete around 1500 B C

J

K Copy of something carved from some kind of material

L 

M Ritual drinking cup

N

O Greek vase

P

Q When a pattern or design is made from something realistic

R

S Black slip applied to already fired red clay pot

To be xeroxed for each student

8

9

Student Sheet

ANCIENT GREEK PAINTING and SCULPTURE 1

1. Title: Ancient Greek Painting and Sculpture I, Dying Warrior, Late Archaic, Temple of Aphaia, Aegina, c490 B.C.

2. Horses, Archaic, Acropolis Museum, Athens, c600 B.C.

3. Horse, Archaic, Acropolis Museum, Athens, c600 B.C.

4. Dog, Archaic, Acropolis Museum, Athens, c600 B.C.

5. Piece of lined paper

6. Crumpled piece of paper

7. Twisted piece of paper

8. Serpent, Archaic, Acropolis Museum, Athens, c580 B.C.

9. Bull's Head, Rhyton, ritual drinking cup, Minoan, from Palace of Knossos, Crete, c1500 B.C.

10. Snake Goddess, Minoan, Palace of Knossos, Crete, c1500 B.C.

11. Somersaulting Toreador, painting, Minoan, from Palace at Knossos, c1500 B.C.

12. Citadel at Mycenae, c1300 B.C.

13. Death Mask, beated gold, from Mycenae, c1300 B.C.

14. Greek Geometric Krater, Archaic Greek, c700 B.C.

15. Fabric decorated with Greek Key design

16. Hitler in Germany wearing Swastika armband, 1933

17. Greek Amphora vase, Oriental style, Archaic, from Rhodes, 6th C. B.C.

18. Greek Twins, Cleobis and Biton, Archaic, Delphi Museum, c600 B.C.

19. – 20. Ranofer, 5th Dynasty Tomb, Old Kingdom, Saqqara, Egypt, c2500 B.C.

21. – 22. Cleobis and Biton

23. – 24. Calfbearer, Archaic, Acropolis Museum, Athens, c570 B.C.

25. Kouros from Anavyos, Archaic, Athens National Museum, c525 B.C.

26. – 27. Heracles Strangling the Nemean Lion, black figured amphora, painted by Psiax, Archaic, Museo Civico, Brescia, c525 B.C.

28. Hera of Samos, Archaic, Louvre, Paris, c575 (on left) Doric Column (on right)

29. Kore from Chios, Archaic, Acropolis Museum, Athens, c530 B.C.

30. Temple of Aphaia, Late Archaic, Aegina, c490 B.C.

31. Reconstruction drawing of east pediment of Temple of Aphaia, Aegina, c480 B.C.

To be xeroxed for each student

10 Student Sheet

32 — 34. Heracles, Late Archaic, from Temple of Aphaia, Aegina, now in Munich Museum, c480 B.C.

35 — 37. The Dying Warrior, Late Archaic, from Temple of Aphaia, Aegina, now in Munich Museum, c480 B.C.

38. Battle Scene from Greek vase, Late Archaic, c490 B.C.

39 — 42. Charioteer, Transitional period, Severe style, Delphi Museum, c470 B.C.

43. Model of Olympia, Olympia Museum

44. West pediment of Temple of Zeus, Transitional period, Severe style, Olympia Museum, c460 B.C.

45 — 47. Centaur Attacking Hippodamia, Transitional period, Severe style, west pediment of Temple of Zeus, Olympia Museum, c460 B.C.

48. Apollo, Transitional period, Severe style, west pediment of Temple of Zeus, Olympia Museum, c460 B.C.

49. Kouros from Anavyos

50 — 51. Poseidon, bronze, 7 feet tall, Transitional period, Severe style, National Museum, Athens, c460-450 B.C.

52. Heracles from Temple of Aphaia

53. Another view of Poseidon

54. Somersaulting Toreador, from Palace of Knossos, Crete

55. Cleobis and Biton

56. Charioteer from Delphi (The End)

<u>POTTERY</u>
GEOMETRIC
ORIENTAL
BLACK FIGURED
AMPHORA
KRATER

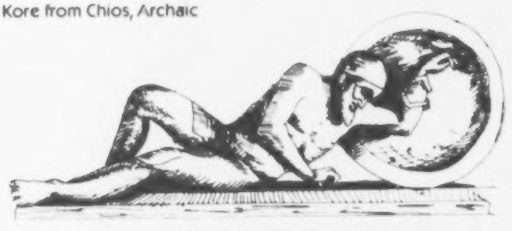
<u>SCULPTURE</u>
UNDERCUTS
RAISED OR HIGH RELIEF
SCULPTURE IN THE ROUND
ARCHAIC
ARCHAIC "SMILE"
"SEVERE STYLE"
TRANSITIONAL PERIOD

Heracles Strangling the Nemean Lion, black figured amphora

Charioteer from Delphi, Transitional period, Severe style

Kore from Chios, Archaic

Kouros from Anavyos, Archaic

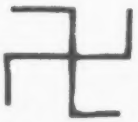


The Dying Warrior, Late Archaic

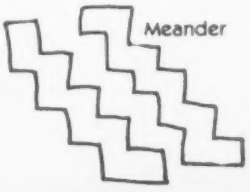
To be xeroxed for each student

Greek Key design

Swastika



Meander



Egg and dart

Scroll

Zig zag

ANCIENT GREEK SCULPTURE 2

Athena Removing her Sandals, from balustrade of Temple of Athena Nike, Classical

ACTIVITY BEFORE FILMSTRIP:
Have one of the students stand in front of the class, in a relaxed pose, as if he or she were waiting in a long line at the movies or supermarket. Ask the other students where his weight is, what has happened to his shoulders, his hips, his head, which leg is straight and which is bent. This is the so-called Greek "controposto" pose that the famed Venus de Milo stands in.

1 Title: Ancient Greek Sculpture II, Victory of Samothrace, Hellenistic, Louvre, Paris, c190 B.C.

2 Girl in twisted pose.

How many positions can your body get into?

3 Girl in action pose.

Your body is incredibly mobile and elastic. What does your body do when you relax?

4 Cleobis and Biton, Archaic, Delphi Museum, c600 B.C.

If you were standing in a line at the movies would you stand like the Greek Twins, Cleobis and Biton with your weight equally centered on both feet?

5 Girl in hipshot or controposto pose.

Usually while standing for a long period your weight is on one leg or the other. When you put your weight onto one leg, it straightens it. Your shoulders dip on that side, while your hips tilt upward. They are in opposite positions. We call this pose **controposto. Contro** means opposite, while **posto** means position. Controposto. Some simply call this the **hipshot** pose.

6 Doryphoros, Spearbearer, Roman copy of original by Polycleitos, Classical, National Museum, Naples, c450 B.C.

This marble statue of Doryphoros, a spearbearer, is a Roman copy of a Greek statue by Polycleitos of around 450 B.C. Doryphoros is in the same pose you would be in if you were standing in line for the movies. His weight is on his right, straight leg, while his left leg is bent. His right shoulder dips while his right hip tilts upward. His upper torso and his head turn slightly to his right while his hips twist slightly to the left. They move in opposite directions. This controposto or hipshot pose is both more subtle to observe and copy than an action pose. It marks the beginning of the early Classical period in Greek art. This was a time when Greece was at peace and Pericles was rebuilding the Acropolis in Athens.

7 Detail of chest of Doryphoros.

8 Detail of head of Doryphoros.

9 Doryphoros with proportion lines drawn on figure.

On top of the statue of Doryphoros we have superimposed lines that show that the perfect man was exactly seven heads tall. According to Polycleitos, these were the ideal proportions for a man. He set down these rules so that other sculptors might also use them in modeling the human figure. Polycleitos was a rival of Phidias, who created the sculptures on the Parthenon.

10 Head of Protagoras, Classical, c450 B.C.

"Man is the measure of all things," said Protagoras. These were the principles of the Classical period, both in art, architecture and philosophy.

11 Discus Thrower, marble copy by Romans of original by Myron, Classical, Museo Terme, Rome, c450 B.C.

The Discus Thrower is a later Roman copy in marble of a bronze statue by Myron modeled around 450 B.C. Like a coiled spring, the Discus Thrower winds up to throw the discus with his right arm. His left hand reaches forward pressing against his right leg, which tightens the spring even more. This is the moment just **before** he lets fly the discus.

Discus Thrower, by Myron, early Classical

12 Detail of Discus Thrower from back

13 Another view of Discus Thrower

14 Dying Niobid, Classical, Terme Museum, Rome, c440 B.C.

15 Another view of Dying Niobid

16 Another View of Dying Niobid

17 Three Goddesses from east pediment of Parthenon, by Phidias, Classical, now in British Museum, London, c432 B.C.

18 Centaur Attacking Hippodamia, Transition, Severe style, Temple of Zeus, c460 B.C.

19 Three Goddesses by Phidias

20 Detail of Three Goddesses

21 Kore from Chios, Archaic, Acropolis Museum, Athens, c530 B.C.

22 Temple of Athena Nike, Classical, Acropolis, Athens, 432 B.C.

23 Athena Removing her Sandals, from balustrade of Temple of Athena Nike, Classical, Acropolis Museum, Athens, 410-407 B.C.

Three Goddesses from east pediment of Parthenon, Classical

24 Detail of Athena Nike

When he does, it will be like a spring bursting from its box. Everything about the figure is totally lifelike, the bending vertebrae of his back, his tense muscles. And yet his body is the ideally perfect body of a man or a god.

His face shows intense concentration and effort. Does he have a face you might remember? No, he is too perfect. Incidentally, the Discus Thrower is seven heads tall.

This is Niobid who has just been shot in the back by an invisible arrow from the bow of Apollo. It seems that Niobid's mother, Niobe, bragged to Hera, the mother of Apollo and Artemis, that she had seven daughters and seven sons, while Hera had only one of each. When Apollo and Artemis learned that their mother had been so insulted by a mere mortal, they took revenge by killing all of Niobe's children.

We see Niobid, her clothes falling from her shoulders in a cascade of drapery, as she vainly tries to pull the invisible arrow from her back, just before she dies.

Beneath her soft skin you can feel her agonized muscles straining, her back arched in pain. Her whole body, rather than her face, tells you of her agony. This was the first time a woman was shown almost nude in a large size statue in Greek art.

You may already know these Three Goddesses from the east pediment of the Parthenon created by Phidias in 432 B.C.

Do you recall these figures from the Temple of Zeus at Olympia, the Centaur Attacking Hippodamia? Which one seems to you to be more alive and natural? I believe you would all agree that the Three Goddesses are more natural looking and have a greater excitement of light and dark.

Phidias created this excitement of light and dark by making deep undercuts in the marble. Their drapery looks as if they had just taken a shower with their clothes on. The Three Goddesses form a tumultuous tumble of bodies with one rounded form rolling into the next one.

It is a single intertwining composition of curves made up of knees, arms, legs and bosoms, all fused into one by the clinging wet drapery. Do you remember what happened to the flat piece of paper when we crumpled it? A whole new kind of excitement was created with light and dark. This is the same idea, for Phidias has chiseled deep undercuts into the marble that make the drapery and bodies look astoundingly lifelike.

Let us look back for a moment at the Kore, the Archaic girl, with her Archaic smile. Perhaps now you can see how far Classical Greek art has come in just one hundred years.

Near the entrance to the Acropolis at Athens stands the Temple of Athena Nike.

On the balustrade wall surrounding it was found this figure of Athena as the winged Victory or Nike. She is removing her sandals so that she may walk on the holy ground inside her temple. Nike is still attached to her stone block. This is called **high relief** or **raised relief** because the background has been deeply cut away leaving the figure raised up.

This is in the same wet drapery style of Phidias and the Three Goddesses. Tremendously deep undercuts have been carved to form the folds of the drapery and yet her body forms can be seen underneath. She looks as if she had just stepped out of the shower.

Pericles by Krisilas

25 Two Roman copies of Aphrodite of Knidos, of the original by Praxitiles, Classical, Vatican Museum, Rome, c330 B.C.

Is this a contraposto pose? It certainly is. These are two different Roman copies of Aphrodite of Knidos copied from the original by Praxitiles. Aphrodite was the Greek Goddess of Love. Each of their right legs are straight, carrying the weight, while their right shoulders tilt downward and their right hips tilt upward. This gives their bodies a langorous S curve.

26 Two views of Aphrodite of Knidos, back and side.

Praxitiles was famous for his carving of smooth, silky skin. The original Aphrodite must have been one of the most natural and beautiful in Greek art. In Greek times as well as Roman she was considered an ideal beauty.

27 Two views of Hermes Holding Baby Dionysos, by Praxitiles, Classical, Olympia Museum, c330-320 B.C.

We have here an even more pronounced hipshot or contraposto pose, with Hermes, the Messenger of the Gods, holding the baby Dionysos, God of Wine. We are looking at the same figure from two slightly different angles. This is believed to have been carved by Praxitiles himself. The S curve of the head, body and legs is very pronounced while the smooth skin contrasts sharply with the textured folds of the drapery. The baby Dionysos is reaching for the grapes that Hermes is probably holding in his right hand.

28 Close up of heads of Hermes and Dionysos.

Would you recognize his face if you met him again? Probably not for his face is perfect. He has no bumps on his nose, no cleft in his chin, no snarling curl to his lip.

29 Pericles by Krisilas, Roman copy, Classical, Vatican Museum, Rome, c440 B.C.

The reign of Pericles saw the rebuilding of the Acropolis at Athens and the sculptures of Polycleitos, Myron, Praxitiles and of course, Phidias.
From 431 B.C. to 404 B.C., when the Greek city states fought among themselves in the Peloponnesian Wars, art and architecture came to a halt.

30 Young Alexander the Great, marble, Roman copy, Hellenistic, 2nd C. B.C.

But when Philip of Macedon conquered all of Greece in 356 B.C. and his son Alexander the Great became king in 336 B.C. art and architecture flourished once again. We see here young Alexander who was educated in Greece and was tutored by Aristotle himself. What we call the Classical period was from the time of Pericles to the death of Alexander the Great.

31 Alexander the Great, detail from Roman Mosaic, copy of Hellenistic painting, 2nd C. B.C.

This is the conquering Alexander as he invades Asia Minor, the Persian Empire, India and Egypt. When Alexander lay dying in 323 B.C., his generals gathered around him. "To whom do you leave your empire?" they asked him. He is supposed to have answered, "To the strongest!" With that the Greek generals divided up the empire and began importing Hellenism, that is, Greek ideas and Greek art.

Alexander the Great, Roman mosaic

32 Ancient Persian sculpture showing Hellenistic influence, c150 B.C.

In no time, Persian gods and goddesses began appearing in Greek dress.

33 Egyptian bronze sculpture of Isis showing Hellenistic influence, c150 B.C.

Egyptian gods and goddesses began to wear wet drapery,

34 Indian god and goddess, showing Hellenistic influence, c250 A.D.

while this Indian god and goddess not only wore Greek clothes but had Greek type faces and hairstyles. In the end, Hellenism was swallowed up by the cultures of each of the conquered countries, but for a few hundred years Hellenism left its influence everywhere in Alexander's empire.

35 Victory of Samothrace, Hellenistic, Louvre, Paris, c190 B.C.

One of the great masterpieces of Hellenistic art is the Winged Victory of Samothrace, who, with her wings spread wide, is landing on the prow of a ship. Perhaps it is Alexander's. A strong wind blows against her body, pressing her drapery against her stomach and wrapping its folds around her thighs and legs. Her magnificent, feathery wings are picked up by the gusty wind while her dress billows out behind her like a flapping sail. The action takes place NOW. It is not the moment before nor the moment after.

14

Victory of Samothrace. Hellenistic

36 Detail of Victory of Samothrace

The play of light and dark across her figure creates excitement. The undercuts are more like gashes in the marble and the action lines are sweeping and dramatic. The opposing diagonals of wings and drapery give the Victory a powerful punch. Hellenistic art was drama, emotion, realism and action. Just like us today, the Hellenistic period was a NOW generation.

37 On left, Aphrodite of Melos, Hellenistic, Louvre, Paris, c150–100 B.C. On right, model in contraposto pose.

Perhaps you know this statue on the left better by her Roman name, Venus de Milo, but the Greeks called her Aphrodite. She was found on the island of Melos. As you can see both Aphrodite and the model are in a contraposto or hipshot pose, but the twist in Aprhodite's pose is even more than the model's. Aphrodite's body forms a sinuous S curve, a diagonal twist, that makes you want to walk continuously around her. Her back is as lovely as her front.

38 Close up of Aphrodite of Melos

Aphrodite is a more subtle Hellenistic figure than the Victory of Samothrace. The texture of her soft skin contrasts with her rich drapery, making both exciting. She invites you to move around her.

39 Dying Gaul, Roman copy of Hellenistic bronze, Capitaline Museum, Rome, c230–220 B.C.

Always pressing closer to the borders of Greece were the Barbarians. In this case it was the Gauls. This figure of a Dying Gaul modeled about 230 B.C., is obviously a brave Gaul, for although he is growing slowly weaker, his arm still supports him.

40 Detail of Dying Gaul

Not only is he natural looking, he is totally realistic, for you can see the actual details of the mortal wound in his side. When you compare it to the excitement of the Victory of Samothrace, the pose is quite restrained,

41 Dying Warrior, Late Archaic, Temple of Aphaia, Aegina, now in Munich Museum, c480 B.C.

but if you compare him with the Dying Warrier from the Temple of Aphaia at Aegina, it seems painfully realistic. What do we mean when we say that something is realistic rather than natural looking? When something is natural looking we mean that it resembles nature, such as a man or a woman or even a warrior. But it is the ideal type rather than the individual.

42 Another view of Dying Gaul

When something is realistic we see an individual person. We see the gore in the wound, the mustache on his lip, and graphic expressions on his face. The Dying Warrior is a mythical Trojan and is natural looking. The Dying Gaul is a real person, not mythical. He is realistic and we truly sense his pain. Much of Hellenistic art seemed to delight in showing pain and agony in a realistic way.

43 Laocoön, Roman copy, Hellenistic, Vatican Museum, Rome, 1st C. B.C.

We see here Laocoön and his two sons who are struggling to free themselves from the vise like coils of a monstrous python. Before the fall of Troy, Laocoon and his sons warned Aeneas that Troy was to fall and revealed the trick of the Trojan horse. Taking his advice, Aeneas escaped from Troy, traveled to Italy, where he was believed to have been the ancestor of Romulus and Remus, the legendary founders of Rome. But Apollo, who had planned to destroy Aeneas, was furious and in his rage at the escape of Aeneas sent a python to strangle Laocoön and his sons.

44 Detail of Laocoön

The tortured, writhing bodies are interwoven by the greedy python who tightens its grip. The twisting diagonals of the serpent, arms, legs and torsos carry your eye around the sculpture, creating a powerfully emotional composition, all the more astonishing, as it has been carved from a single block of marble. Their agony is happening now. It is not the moment before nor the moment after. Can you see that the two sons are not shown as children, but simply as smaller adults.

45 Head of Laocoön

Is this realistic? Yes, notice the screaming mouths, the eyes cast up to heaven, the excruciating pain.

46 Young Jockey, bronze, Hellenistic, National Museum, Athens, c200 B.C.

The tiny Jockey races full speed on his seemingly giant horse, across a plain. The lifesize bronze statue was found in recent years off the coast of Greece by divers.

47 Detail of Jockey and Horse

Its action is as great as the Toreador flipping over the bull from the Palace at Knossos, Crete. Diagonal lines of action make up both the body of the boy and that of the racing horse.

48 Detail of Jockey and Horse

Within the galloping movements there are many details, such as the ribs of the horse, its eyes, the veins that stand out on his head.

49 Detail of Jockey and Horse

You can see the folds of the boy's tunic slung under his arm. Sweat and wind have tightened the curls on his head. His fingers grip the reins, his eyes are wide in anticipation. The details harmonize perfectly with the whole and like the Victory of Samothrace, work towards its breathtaking action.

50 Great Altar of Zeus at Pergamon, Hellenistic, now in Berlin Museum, c180-150 B.C.

An uproarious battle is in progress between the gods and the giants on the Great Altar of Zeus at Pergamon. Hair is flying, mouths are open in shouts of pain and battle cries. Wings flap in the air. Is this sculpture in the round or sculpture in relief? This is sculpture in raised or very high relief as the background has been deeply cut away.

51 Detail of Altar of Zeus at Pergamon

This is the ultimate in emotional realism, action, violence and pain. Faces are being stepped upon, bodies are being mutilated. You can almost hear the awful screams of agony and clash of metal. Which do you prefer, the violence here, or the containment and subtlety of Heracles from the Temple of Aphaia?

52 Heracles, Late Archaic, Temple of Aphaia, Aegina, now in Munich Museum, c480 B.C.

Like a book or a story heard on the radio, Heracles allows you to imagine what has happened or is about to happen.

53 Another view of Altar of Zeus at Pergamon

Like television, the Great Altar of Zeus at Pergamon tells you everything. Which is better? Realism and emotion do not necessarily make better art. It is simply a different approach. For many people Classical art with its ideally beautiful figures was the height of Greek art. Perhaps Hellenistic art speaks to you more.

54 Old Marketwoman, marble, Hellenistic, Metropolitan Museum, N.Y., c150 B.C.

This Old Market Woman shuffles about the marketplace scrounging for food. Every detail of her evil smelling clothes, her wrinkled body and white hair is described.

55 Detail of Old Market woman

Do you find her interesting? Do you think she is great art? When realism is created for its sake alone, it often makes for bad art.

56 Cleobis and Biton, Archaic, Delphi Museum, 600 B.C.

We have seen how the human figure has developed in Greek art from the stiff, blocky and stylized figures of the Archaic period

57 Charioteer from Delphi, Transitional period, Severe style, Delphi Museum, c470 B.C.

to the more natural looking figures of the Transitional period.

58 Aphrodite of Knidos, Classical

During the Classical period, from the time of Pericles to the death of Alexander, we saw the human figure become the ideally perfect man, god and, finally, woman.
With the death of Alexander the Great, the disillusioned Greeks saw that people were really despotic, grubby and greedy afterall. The Hellenistic age brought with it realism, action, emotion, pain and fear of the future. The beautiful, young Aphrodite of Knidos, with her soft, silky skin, grew old.

59 Old Market Woman, Hellenistic

She had suddenly become the evil smelling old woman with her wrinkles and rags shuffling about the marketplace.

60 Poseidon, Transitional (The End)

Whether Archaic, Transitional, Classical or Hellenistic, Greek art has been an inspiration to the art of every age since that time.

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Discussion:

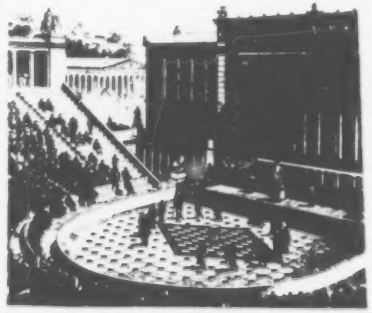
Greek Painting and Sculpture 1

1. What is sculpture?
2. What elements make sculpture more interesting?
3. What are some of the differences between the earlier Archaic style of sculpture and that of the later Transitional, "Severe" style of sculpture?
4. Why do you think so many of the "Archaic" style sculpture, such as the Calfbearer and Kore wear the "Archaic Smile?"
5. Is anyone in your classroom wearing an example of a Greek key design?

Discussion:

Greek Sculpture 2

1. Demonstrate the controposto pose
2. What was your favorite piece of sculpture shown and why?
3. What kind of sculpture do you find is more effective or interesting, sculpture in raised relief, or sculpture in the round?
4. Do you prefer the realism of Hellenistic sculpture or the idealism of the Classical period of Greece? Why?
5. Are there any examples of Greek style art in your community?



ANSWERS TO QUIZ NUMBER 1
GREEK PAINTING AND SCULPTURE 1

1.-J
2.-C
3.-H
4.-K
5.-I
6.-M
7.-O
8.-Q
9.-L
10.-E
11.-S
12.-G
13.-D
14.-N
15.-A
16.-P
17.-F
18.-R

ANSWERS TO QUIZ NUMBER 2
GREEK SCULPTURE 2

1.-K
2.-E
3.-H
4.-I
5.-G
6.-D
7.-C
8.-L
9.-M
10.-A
11.-F
12.-J
13.-B

ANSWERS TO QUIZ NUMBER 3
(FUN QUIZ)

1.-B
2.-B
3.-B
4.-A
5.-B
6.-A
7.-A
8.-B
9.-A
10.-A
11.-A
12.-A

17

Student Sheet

ANCIENT GREEK SCULPTURE 2

1. Title: Ancient Greek Sculpture II, Victory of Samothrace, Hellenistic, Louvre, Paris, c190 B.C.

2. Girl in twisted pose

3. Girl in action pose

4. Cleobis and Biton, Archaic, Delphi Museum, c600 B.C.

5. Girl in hipshot or contraposto pose

6 — 8. Doryphoros, Spearbearer, Roman copy of original by Polycleitos, Classical, National Museum, Naples, c450 B.C.

9. Doryphoros with proportion lines drawn on figure.

10. Head of Protagoras, Classical, c450 B.C.

11. — 13. Discus Thrower, marble copy by Romans of original by Myron, Classical, Museo Terme, Rome, c450 B.C.

14. — 16. Dying Niobid, Classical, Terme Museum, Rome, c440 B.C.

17. Three Goddesses from east pediment of Parthenon, by Phidias, Classical, now in British Museum, London, c432 B.C.

18. Centaur Attacking Hippodamia, Transition, Severe style, Temple of Zeus, c460 B.C.

19. — 20. Three Goddesses by Phidias

21. Kore from Chios, Archaic, Acropolis Museum, Athens, c530 B.C.

22. Temple of Athena Nike, Classical, Acropolis, Athens, 432 B.C.

23. — 24. Athena Removing her Sandals, from balustrade of Temple of Athena Nike, Classical, Acropolis Museum, Athens, 410-407 B.C.

25. — 26. Two Roman copies of Aphrodite of Knidos, of the original by Praxitiles. Classical. Vatican Museum, Rome. c330 B.C.

27. Two views of Hermes Holding Baby Dionysos, by Praxitiles, Classical, Olympia Museum, c330-320 B.C.

28. Close up of heads of Hermes and Dionysos

29. Pericles by Krisilas, Roman copy, Classical, Vatican Museum, Rome, c440 B.C.

30. Young Alexander the Great, marble, Roman copy, Hellenistic, 2nd C. B.C.

31. Alexander the Great, detail from Roman Mosaic, copy of Hellenistic painting, 2nd C. B.C.

32. Ancient Persian sculpture showing Hellenistic influence, c150 B.C.

33. Egyptian bronze sculpture of Isis, showing Hellenistic influence, c150 B.C.

34. Indian god and goddess, showing Hellenistic influence, c250 A.D.

To be xeroxed for each student

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35. – 36. Victory of Samothrace, Hellenistic, Louvre, Paris, c190 B.C.

37. – 38. On left, Aphrodite of Melos, Hellenistic, Louvre, Paris, c150-100 B.C. On right, model in contraposto pose

39. – 40. Dying Gaul, Roman copy of Hellenistic bronze, Capitaline Museum, Rome, c230-220 B.C.

41. Dying Warrior, Late Archaic, Temple of Aphaia, Aegina, now in Munich Museum, c480 B.C.

42. Another view of Dying Gaul

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58. Aphrodite of Knidos, Classical

59. Old Market Woman, Hellenistic

60. Poseidon, Transitional (The End)

Discus Thrower, by Myron, early Classical

Athena Removing her Sandals, from balustrade of Temple of Athena Nike, Classical

Three Goddesses from east pediment of Parthenon

CLASSICAL
IDEAL TYPE
THE MOMENT BEFORE THE ACTION
WET DRAPERY STYLE

HELLENISTIC
REALISTIC
EMOTIONAL
ACTION

Victory of Samothrace Hellenistic,

19

Quiz

Greek Sculpture 2

Quiz No. 3

1 _____ Charioteer from Delphi
Transitional Period
"Severe Style"

2 _____ Dying Warrior
Late Archaic

3 _____ Victory of Samothrace
Hellenistic

4 _____ Kore, with her "Archaic Smile"

5 _____ Discus Thrower
Classical Greek

6 _____ Kouros, Greek Athlete
Archaic

7 _____ Pericles, by Krisilas
Classical

8 _____ Alexander the Great
Mosaic, Roman copy
Hellenistic

9 _____ Three Goddesses, by Phidias
Classical

10 _____ Horses and Riders, by Phidias
From Panathenaic Procession
Frieze on Parthenon

11 _____ Caryatid from Erechtheum
Acropolis, Greece
Classical

12 _____ Athena Nike
From Temple of Athena
Nike balustrade

13 _____ Amphora, with painting of "Heracles Strangling the Nemean Lion"
Archaic Greek

B

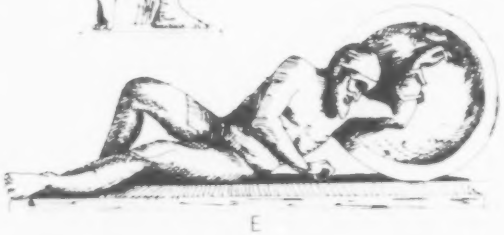
A

G

C

D

F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H

I

K

J

L

M

To be xeroxed for each student

Activity

SUGGESTED ACTIVITY:

1. Ask each student to choose one of the twelve Greek gods and goddesses from Mt. Olympus and research the myths and stories about them.
2. Ask the students to form small groups and have them act out these stories as if they were TV dramas.
3. Have some of the students research myths of the Greek heroes, such as: The Twelve Labors of Heracles; Jason and the Golden Fleece; Odysseus, Perseus and the Gorgon's head; Achilles at the Battle of Troy.
4. Have small groups act out these myths while the others try to identify them.

TWELVE GODS OF MT. OLYMPUS

APPOLLO, GOD OF MUSIC AND LIGHT. Apollo was the ideal Greek, handsome and athletic, who could play the lyre beautifully. He was also the patron of philosophy and medicine. Apollo gave his advice to mortals through the Delphic Oracle.

HERA, GODDESS OF MARRIAGE. As sister and wife of Zeus, Hera spent her time trying to foil his love affairs, and punishing Zeus' lady friends. Their quarrels caused earthly storms.

ARES, GOD OF WAR. Son of Zeus and Hera, Ares was the bloodthirsty God of War. Sometimes cowardly and quarrelsome he was not popular among the gods.

HESTIA, GODDESS OF THE HEARTH. This sister of Zeus spurned both her suiters, Poseidon and Apollo. She vowed to stay chaste. Because she saved the peace of Olympus, Zeus gave her the first and best part of every sacrifice.

POSEIDON, GOD OF THE SEA. Second in power to his brother Zeus, Poseidon ruled the oceans, lakes and rivers. In the contest for Athens, Poseidon offered the Athenians a horse and a spring of salt water. He lost out to Athena.

ARTEMIS, GODDESS OF YOUTH AND THE HUNT. Young, slender and the twin sister of Apollo, Artemis was concerned with the hunt and chastity. When the hunter Actaeon came upon her bathing, she was outraged. She changed him into a stag and his own hounds fell upon him.

ATHENA, GODDESS OF WISDOM. At birth Athena sprang from the head of Zeus, fully grown and dressed in armor. Athena won the contest between herself and Poseidon for the possession of Athens by giving the city the olive tree. As a warrior goddess, she helped heroes like Odysseus and Heracles.

ZEUS, KING OF THE GODS. As "Lord of the Sky," Zeus ruled Olympus, and punished mortals and lesser gods with his thunderbolts. Zeus had many loves. Disguised as Taurus the bull, Zeus carried off Europa to crete. She bore him sons, including Minos, King of Crete. The continent of Europe was named after her.

APHRODITE, GODDESS OF LOVE. The symbol for Aphrodite is the shell on which she rose out of the sea. Her lovers were legion, among them was Ares, God of War. Whoever wore her magic girdle found love. Her husband was Hephaestus, God of Fire.

HERMES, GOD OF TRADE AND TRAVEL. As the messenger of the gods, Hermes was fleet of foot. He invented boxing and racing. With his golden staff, he led souls of the dead to Hades. He invented the Lyre and gave it to his brother Apollo.

Activity

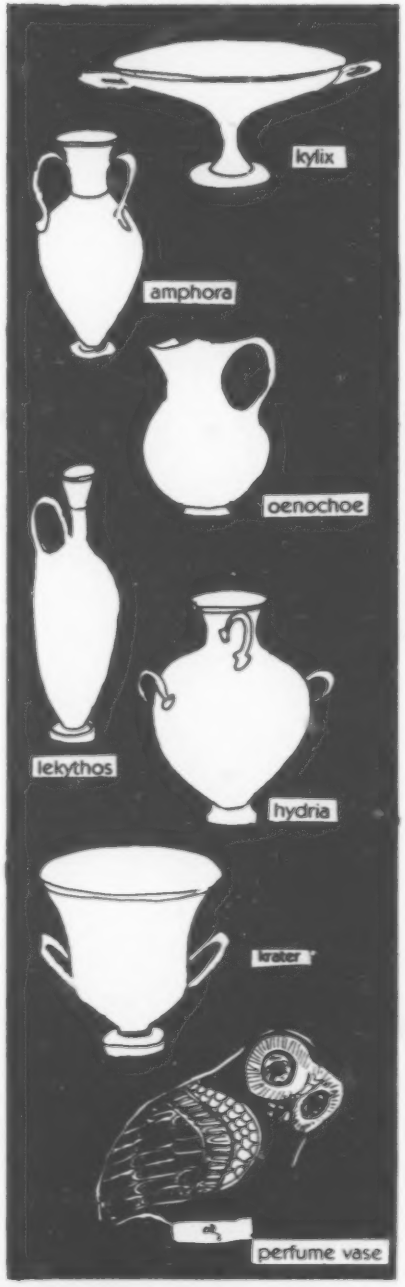
SUGGESTED ACTIVITY:

1. Ask each student to choose one of the vases on the right and to copy it in red clay (if that color is available). When the vase has dried, have the student paint on it in black slip a scene of Greeks battling Trojans, or a scene from one of the Greek myths already researched by the student. Now fire the vase in the kiln. This is called Black Figure painting.

HEPHAESTUS, GOD OF FIRE. Ugly and lame Hephaestus worked inside fiery volcanoes to forge armor, Zeus' throne and even palaces. Suspicious of his wife, Aphrodite, he strung a net above her couch and trapped her with Ares, God of War. The Olympian gods had a good laugh.

HADES, GOD OF THE UNDERWORLD. Hades was also a brother of Zeus and ruled the gloomy underworld. Charon, the surly ferryman, carried the dead across the River Styx. The good souls went to the Elysian Fields, while the wicked were tormented in Tartarus.

GREEK VASES



Heracles strangling the Nemean Lion, Black Figure Amphora vase by Psiax, c520 B.C.

2. Have some of the students cover larger areas of their vase with black slip. Now with a sharp tool have them scratch out the figures, allowing the red clay to show through. Now fire the vase in the kiln. This technique is called Red Figure painting.

Heracles from a Greek Black Figure vase.

Activity

GREEK SCULPTURE: WOMEN

SUGGESTED ACTIVITY:

1. These are some sculptures of women shown in Greek art. Ask the students to research the role of women in ancient Greece. What were her rights? Could she own property?
2. Not until late Classic and Hellenistic periods was a woman ever shown in the nude. A woman's body was not considered as beautiful as the male athlete. This was probably why Phidias invented the "wet drapery" style. Ask the students to model a figure in clay. Now have them wet a piece of cloth, a handkerchief, or paper towel and drape it around their figure.
3. Now that the students can see the "wet drapery" style using wet cloth or paper towel, ask them to reproduce the effect using only clay just as Phidias did.

Kore, Archaic Greek maiden, c510 B.C. She has an "Archaic Smile."

Three Goddesses, by Phidias, from east pediment of Parthenon, c438 B.C. Classical period, now in British Museum.

Victory of Samothrace, c190 B.C. Hellenistic period.

CARYATID from Porch of the Maidens, Erechtheum.

Pericles, wise statesman, who ruled Athens from 460 B.C. - 429 B.C. during the Golden Age of Greece.

Activity

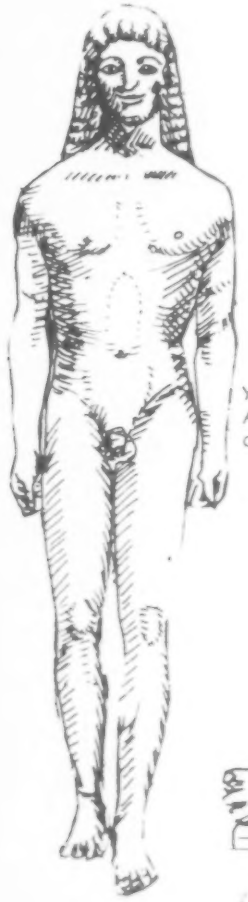
GREEK SCULPTURE: MEN

SUGGESTED ACTIVITY:

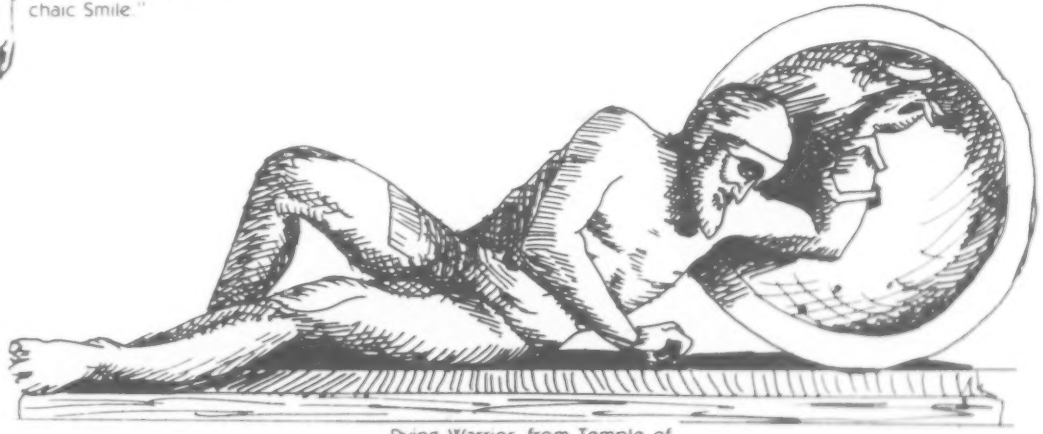
1. Ask the students to pretend that they are in the studio of Polycleitos or Phidias in Athens. Have one of the students pose in an action pose, and another in a *contraposto* or hipshot pose. Have some of the other students draw the model, while others try to make a figure in clay.
2. Form some fairly large blocks of clay. While it is still moist, but not too soft, ask the students to carve into it with a knife or chisel. Let them pretend they are chiseling a piece of sculpture out of marble. Marble is fairly soft when it is still in the quarry. It hardens only in contact with the oxygen in the air.

Charioteer from Delphi, c470 B.C. Transitional period. He once stood in his chariot holding the reins of his horses.

Alexander the Great conquering the world.



Youthful Athlete, c570 B.C., Archaic period, note his "Archaic Smile."



Dying Warrior, from Temple of Aphaia, c490 B.C. end of Archaic period.

The Discus Thrower, by Myron, 450 B.C. Early Classical period.

To be xeroxed for each student

Fun Quiz

1 —

a ☐ – Long stemmed Mycenean drinking cup for heavy drinkers.

b ☐ – World's first stone column and capital from Saqqara in Egypt

1

2

2

a ☐ – A Roman footstool with ram's horn decoration

b ☐ – A Greek Ionic column and capital

3

4

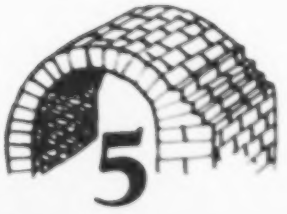
a ☐ – The Keeper of Empress Theodora's Bears, Hippodrome, Constantinople, Byzantine

b ☐ – The Charioteer, from Delphi, Greece

4

a ☐ – A diagram of the world's largest tomb, the Great Pyramid of Cheops, Giza, Egypt

b ☐ – A Roman Arrowhead with string mechanism



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5

a ☐ – Entrance to an ancient subways station

b ☐ – A Roman barrel vault of bricks

6

6

a ☐ – Egyptian God, Amon-Re, most powerful god of New Kingdom

b ☐ – Ennis, Greek God of Feathery headdresses

7

7

a ☐ – Victory of Samothrace, Greece

b ☐ – Byzantine Angel Gabriel

8

8

a ☐ – The Capitol Building in Washington, D.C.

b ☐ – The Pantheon in Rome, designed by Roman Emperor Hadrian

9

9

a ☐ – The Erechtheum, Acropolis, Athens, Greece

b ☐ – The Harem of Caliph Abdullah Sumkapoolahhallvhoo, Istanbul

10

10

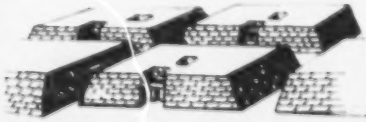
a ☐ – Nike Fastening Her Sandal, Acropolis, Athens, Greece

b ☐ – Veiled Egyptian Dancer scratching her ankle, Luxor, Egypt

11

a ☐ – Village of tombs of mastabas, at Saqqara, Egypt

b ☐ – Ancient Roman Orphanage for Wayward Girls, Rome



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12

12

a ☐ – Egyptian Dwarf God Bes, god of Marriage and the Home

b ☐ – Ahktum, Greek God of Flowers and Belly Dancers

CONSULTANTS

Dr. John Hoag has been Professor of Art History at the University of Colorado in Boulder since 1965. He graduated from Harvard in 1941 and received his Ph.D. from Yale in 1958. From 1956 to 1965 Dr. Hoag not only taught at Yale but was also Art Librarian. He is the author of "Islamic Architecture," published by Harry Abrams, 1977, and "Western Islamic Architecture," published by George Braziller in 1963.

Dr. Hoag worked very closely with Ann Campbell Luce as head of her thesis committee, when she first began working on the project in 1973, because he felt there was an urgent need for bringing art history into the school classroom. He still insists on checking all the information included in the multi-media kits.

Phyllis Clark has been an elementary teacher at the Heatherwood School in Boulder, Colorado for ten years, where she teaches sixth grade. She is currently Content Area Resource Teacher (CART) for Elementary Social Studies for Boulder Valley Schools. Because of her creative and innovative approach to teaching, Mrs. Clark has contributed to the writing of many guides for social studies in elementary education. In particular she authored "Crossroads of the West," a teaching guide, published by Pruett Press. She has been actively involved in teacher training in economics, social studies, and legal education all across Colorado.

Willis Knierim, who teaches at Centaurus School in Lafayette, Colorado, is Content Area Resource Teacher (CART) for Middle Level Social Studies in the Boulder Valley Schools. As consultant in social studies, he chaired the Help Mobile, CEA's mobile school, at all grade levels, setting up workshops in individual areas. Mr. Knierim received his master's degree in Public Administration, and has served in numerous public agencies on special projects. His curriculum material has been used throughout the United States, which includes "Teaching the Constitution." In addition to writing curriculum material, he created audio visual material on international relations for the Taft Institute, at the University of Wyoming. Mr. Knierim grew up in India and spent much time in Asia.

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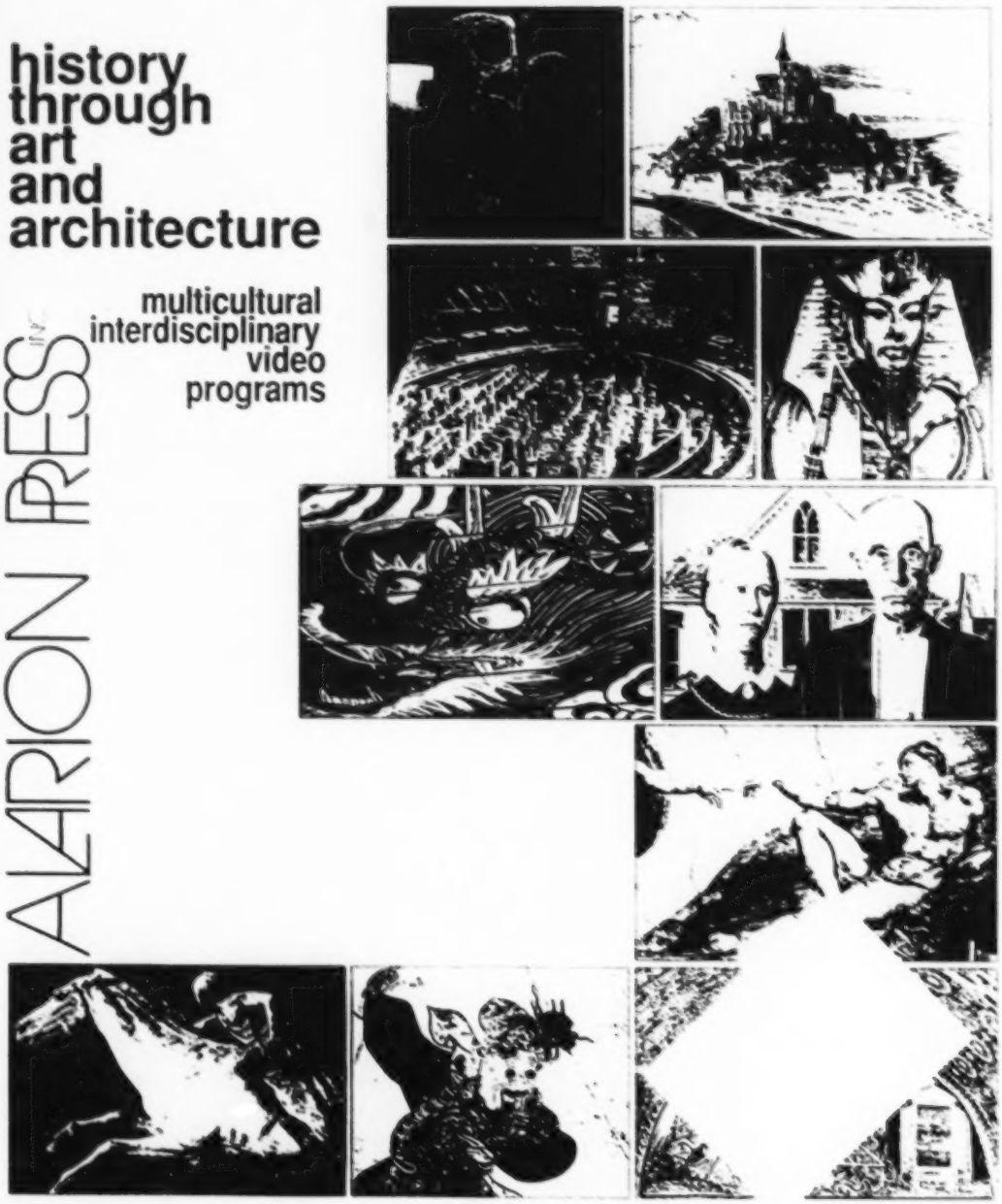

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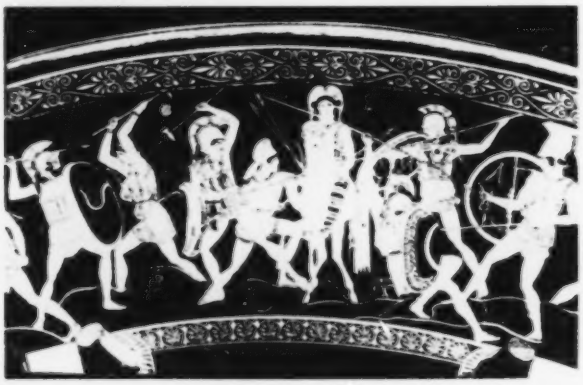

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